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THE AMERICAN ROSE SOCIETY

**THE AMERICAN
ROSE ANNUAL**



PLATE I. New Unnamed American Hardy Everblooming Climbing Rose,
"66 II, 1916." Originated by Capt. George C. Thomas, Jr.
(See page 37)

THE AMERICAN ROSE ANNUAL

*THE 1920 YEAR-BOOK OF
ROSE PROGRESS*

EDITED FOR THE AMERICAN
ROSE SOCIETY BY

J. HORACE McFARLAND



1920
AMERICAN ROSE SOCIETY
EDITOR'S OFFICE
HARRISBURG, PA.

THE American Rose Annual is supplied to all members of the American Rose Society whose dues are paid for the current year. Additional copies are supplied to members only at \$1 each, postpaid. When sold separately, the price of the Annual is \$2, and includes annual membership. Members may obtain copies of the 1917, 1918 and 1919 Annuals, so long as in print, at \$1 each, and of the 1916 Annual (the first issue), at \$2.

Address, E. A. WHITE, SECRETARY, ITHACA, N. Y.

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By J. HORACE MCFARLAND, Editor

The 1921 American Rose Annual will be issued in March, 1921

*Completely prepared, illustrated and
printed by the*
J. HORACE MCFARLAND COMPANY
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Harrisburg, Pa.

A Greeting

TO THE AMERICAN ROSE
SOCIETY:

THE great task of pioneering and bringing the land under the plow has, for the most part, been accomplished. The people of this nation are NO LONGER content with the attainment of the three primary necessities—food, clothing, and shelter. They demand in addition that the food shall be the product of many climes; that the clothing shall befit their station and work; and that the shelter shall not only provide bodily comforts, but that it shall be surrounded by trees and shrubs, not alone for the shade and protection they offer, but for the pleasure they afford as they express life's great drama in the passing of the seasons.

No decorative plant has been more closely identified with the progress of western civilization than the Rose. It is an insignia alike of joy, of sorrow, of love, and of war. It is the flower beloved by all. Certainly those who contribute in any way to the propagation, development, and culture of the Rose are adding much to the joys and beauties of life.

EDWIN T. MEREDITH,
Secretary of Agriculture.

Washington, D. C.,
March 5, 1920.

THE AMERICAN ROSE SOCIETY

ORGANIZED MARCH 13, 1899

*"To increase the general interest in the cultivation and improve
the standard of excellence of the Rose for all people"*

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MEMBERSHIP

Life Members (\$50) and Annual Members (\$2) receive all publications, tickets to all exhibitions, and are entitled to vote at all meetings.

Affiliated membership can be secured for associations and societies interested in rose culture, at the rate of \$1 per member each year, receiving in consequence the current American Rose Annual, supplied through the secretary of the affiliating organization.

Remit, with full address, to E. A. White, Secretary, Ithaca, N. Y.

*Deceased

EDITOR'S PREFACE

THAT the Rose in America is becoming American in character as well as in mere plant-growth is the dominating fact recorded in this, the fifth issue of the American Rose Annual. It is in no derogation of the great work of European rose-hybridizers—also recorded with much particularity in the following pages—that this statement is made. England, Ireland, and Scotland breed admirable roses for Great Britain's humid and less extreme climatic range; France and Germany produce roses reasonably right for Europe; and now America is striving earnestly to grow varieties including all the qualities of those produced across the Atlantic, plus the reserves of vigor and endurance necessary for our climate of extremes in temperature and humidity.

The Rose-Zone Map of the United States, experimentally determined by the careful experts of the Bureau of Plant Industry in the Federal Department of Agriculture, and first published in this Annual, is a long step into concrete knowledge of American rose possibilities, just as the original work of Dr. Van Fleet and Captain Thomas adds other and very interesting chapters of rose-lore important to all the world as well as the United States.

Within the hampering space-limits of a pound's mailing weight, anxious effort has been made to supply the members of the American Rose Society with freshly gathered information setting forth rose-progress in all the world as well as in America. Hearty thanks are due to the kindly and cultured men and women who have contributed to this purpose, and also apologies are made to some of them for the contractions necessary by reason of the space-weight limitation.

It is in consequence of the manifested preference of the members of the American Rose Society that much space has been given to the detailed tabular reports of the National Rose

Test-Garden and to certain interesting back-yard trials. The closely accurate list of roses introduced in America, revised to the month of publication, is presented without apology.

The list of new roses has been prepared with painstaking care, in order that American rose-lovers may have information as accurate and up-to-date as possible. The starred descriptions are written from the American Rose Society's Official Record Card as presented on page 112, and attention is suggested to the full information thus provided. Interested members can help in perfecting this record system if they will ask for the necessary cards.

It would be ungracious to fail in acknowledging the courtesy of Capt. George C. Thomas, Jr., through whose liberality has been made possible the publishing in this Annual of the unique color-pictures of his new creations in everblooming hardy climbing roses.

Particular attention is urged to the expanded "Rose Notes," including in this Annual many items of large rose importance, so handled only because of space limitations. To miss scanning these pages will be to avoid acquaintance with much valuable and interesting rose-lore.

Our foreign friends, in England, France, Norway and elsewhere, have been most helpful in promoting the comprehensiveness of the rose-survey aimed at in this Annual.

The Dedication, by the Federal Secretary of Agriculture, and President Pyle's inspiring message to the members of the American Rose Society are especially commended to our readers.

The Society's members have expressed themselves interestingly, as may be noted on page 77. One of the requests was for more inclusive advertising of the newer roses. The Editor refers with confidence to the pages following the text of the Annual, including only such announcements as can be guaranteed with pride.

J. HORACE McFARLAND

Harrisburg, Pa.,

March 15, 1920

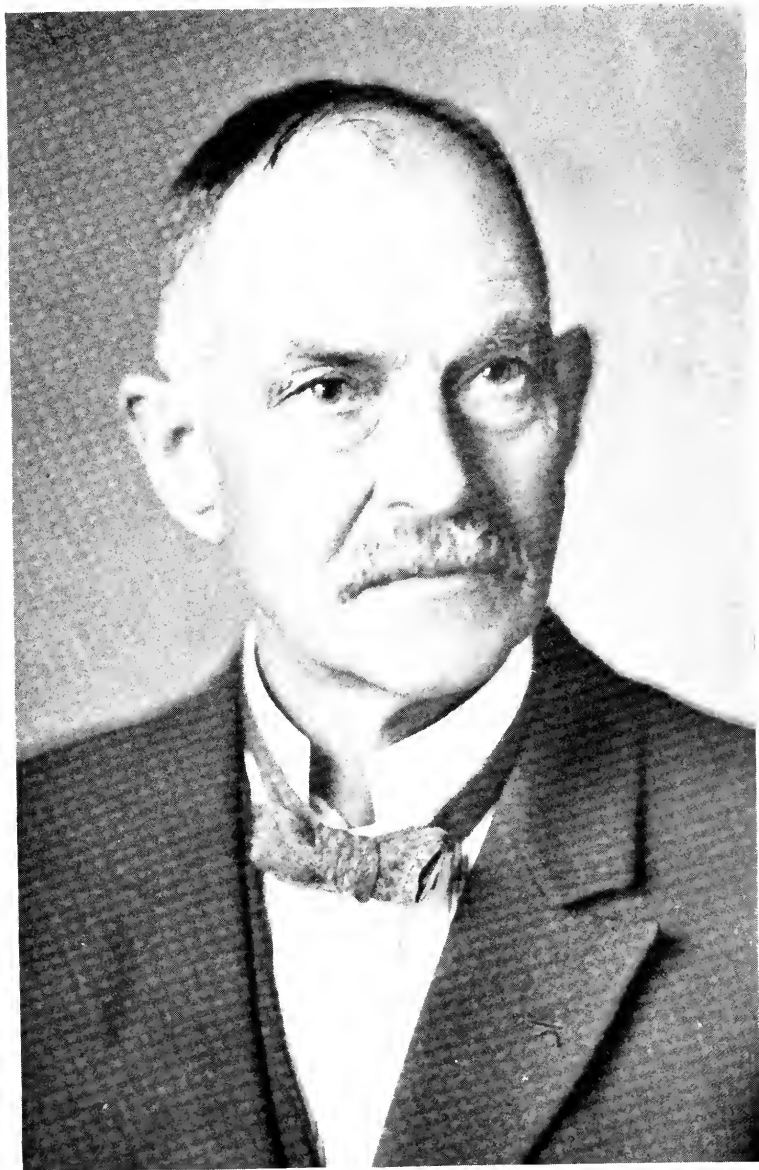
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PLATE II. DR. W. VAN FLEET

Plant Physiologist, Department of Agriculture; originator of American Pillar,
Silver Moon, Dr. W. Van Fleet, Alida Lovett, Sir Thomas Lipton
and many other roses

(See page 23, and Plates III, V, VI, and VII)

THE AMERICAN ROSE ANNUAL

The Work and Aims of the American Rose Society

A MESSAGE TO ITS MEMBERS BY THE
PRESIDENT, ROBERT PYLE

HISTORY, in the American Rose Society, has yet to be made. Though much has been done by the pioneers who have laid its foundations, its great work lies ahead. Upon the foundations laid we must build with vision.

What is this foundation, and what is the vision?

1. The American Rose Society now includes a growing and representative membership, both amateur and professional, exceeding 1,700 in number, and representing all parts of the United States and much of the world. The work of the Society is conducted by a group of unselfish rosarians whose loyalty and ability have been abundantly proven.

2. Carefully planned rose-test gardens have been established under the oversight of the American Rose Society at Washington, in coöperation with the Department of Agriculture; at Ithaca, with Cornell University; and in coöperation with the Park Departments of Hartford, St. Paul, and Portland (Ore.). These test-gardens are each under direct charge of a selected local committee appointed by the American Rose Society. The reports from Washington and from Portland, published in this volume, indicate the great value of these gardens.

3. There exists the beginning of a system of affiliated local rose societies, each holding meetings and arranging lectures and shows, to arouse wider and more intelligent interest in roses among all types of people. These organizations profit in the way of literature, prizes, and supervision by affiliation with the American Rose Society.

4. A great inducement to membership in the American Rose Society is the privilege, not otherwise obtainable, of receiving this book, the American Rose Annual, edited by J. Horace McFarland. This yearly volume is a noteworthy permanent record of rose-progress and rose-thought. Mr. McFarland's individual contribution of time and interest to the making of this

Annual, as a labor of love, is the present high-water mark of constructive rose-effort.

Thus, with a capable and enthusiastic personnel, with established rose-test facilities for every important climatic zone of America, with a developing equipment for promoting local organized rose-effort, with the Rose Annual focusing the collection and distribution of up-to-date rose-information, it is apparent that the American Rose Society is ready to adequately serve in promoting a great rose-advance.

Now what is our rose-vision for America?

Millions of homes throughout this land have not yet sensed real rose-joy. Upon us is the duty of stimulating in them the love of roses. Indeed, with the encouraging example of England, we now know that we can, we must, nationalize the love for roses.

To realize this vision, personal effort is necessary. Therefore, on behalf of the executive officers, I urge every member to work for the accomplishment of the following definite aims:

First: That in every American city with a working park department, there should be established a public rose-garden. (Please write us if your town is interested.)

Second: That we should at least treble in 1920 the number of local rose societies, and promote the holding, in that year at least, of ten times as many local rose shows as have heretofore been held. (If ten people in your community are interested, please write our Secretary for suggestions.)

Third: That we should provide means to increase largely the prizes and honoraria available to hybridizers of worthy new roses, or to anyone making a noteworthy contribution to the cause of the rose in America. (Rose-lovers with available funds for this purpose are urged to consult officers of this Society in reference to plans already formed in this direction.)

Fourth, and most important: That we should at least double our membership within the next year. (Every member would profit by such increase, for increased income will make possible the needed publication of an authoritative American rose manual, and of a complete American rose catalogue.)

Will you not help to realize this vision for American rose-prosperity by inviting to membership your friends who ought to be interested?

What Are Old-Fashioned Roses?

By the Author of "The Garden of a Commuter's Wife"

The Editor of the Rose Annual asked this question of The Commuter's Wife, and whether the following excursion into the Garden of Second Childhood is an answer, is not for her to say.—"BARBARA."

WHEN talking of women's clothing, *old-fashioned* may mean only day before yesterday, and is a term of the most withering contempt. With people, however, real folks, and with flowers, *old-fashioned* means that they have been with us until they are thoroughly acclimated, deep rooted in the soil as well as in our affections, and, by an identity all their own, have "made good."

Old-fashioned flowers in general have been coming into their own these last few years, by means of the new blood of hybridization that has added many branches and new vigor to what was originally a dwarf family tree. We speak with affection of the flowers in the gardens of our grandmothers, but we seldom realize how few the species that were therein gathered, until we chance upon some list in one of the careful diaries or letters of the time, and when it comes to roses—though the rose was the first flower mentioned in the literature of the Aryan race from which we have all sprung—the rose as we know it is the result of an education as careful in its way as that which has produced any of the wonders of modern times.

When we use the term "old-fashioned roses," therefore, we vaguely mean certain sorts that our forebears brought with them from their Old-World gardens, which, being honestly grown on their own roots, took hold on the less gracious soil of the new land and became a part of our memory gardens. For the most part these were June or summer roses, those that bloom but once during the season, though the exact time may be varied according to climate and location. Though they have given place to offspring to which may be traced the best of modern roses, yet the originals should have a place in every sizable rose-garden of today, not only as a matter of rose-family genealogy, but also because their flowers have a positive, if short-lived, charm.

In this group you will find the slender climbing Ayrshires of English origin, and the Banksias, with small clustered blossoms of violet fragrance, coming to us from China, via England, something over a hundred years ago, to make themselves entirely at home in the charming gardens of the South, from which they often strayed to naturalize themselves.

Then come the Damask roses, originally from Syria, the giver of rose-water and attar of roses, and the vigorous founder of the Hybrid Perpetual type; the China rose, from which the Noisette and Bourbon types have sprung; the Moss roses, both common and crested, going from Holland to England about the time that the Pilgrim Fathers set sail, and believed to be kin of the Provence rose because of a likeness in perfume. These are the most beloved of the old-fashioned tribe, because of their beautifully mossed cups and their general air of exquisite distinction.

We surely cannot do without the tightly furled cabbage or Provence rose, that the French grace with the title of the "Rose of a Hundred Leaves," or the Austrian Briar of southern Europe that heralds the garden rose season with its wands of single golden blossoms and picturesquely thorned stalks under the name of "Harison's Yellow."

The old English sweetbrier, too, cannot be spared, even though we have its children, the beautiful Penzance hybrids that bear the names of Amy Robsart, Meg Merrilies, Anne of Geierstein, Flora McIvor, and Effie Dean. We have a native sweetbrier also that may well be used to carry an echo of the June rose-garden fragrance up the picturesque, rough hillsides of the wild garden to hobnob with our precious "true blue through and through" American laurel.

We are as lacking in indigenous roses as we are in human inhabitants, even though the native Prairie rose has proved a useful parent and the Noisette tribe is said to have been at least American-born, having sprung from a seed of a Musk rose crossed with a China rose and first grown by Philippe Noisette, in New Orleans, in 1817, who sent the result to his brother in France, who further developed it.

No; when your Editor asked the question, "What are old-fashioned roses?" I was about to answer it offhand, but, stop-



PLATE III. Unnamed Hardy Climbing Rose
(*Rosa Wichuraiana* \times *Duchess of Wellington*). Originated by Dr. W. Van Fleet;
as Photographed in the Editor's Garden
(See page 22)

ping to think for a moment, and then plunging deep into certain rose genealogies, I found to my astonishment that, except as a matter of origin, there are few old-fashioned roses worth speaking about if we count merely by years, instead of established worthiness!

There are very few roses that could stand the test demanded for the entrance to our American patriotic societies, for to be a Colonial Dame, Madame Rose must have arrived on the soil prior to 1750, while the ancestor of a D. A. R. must have been of fighting age in 1776! The Daughters of 1812 could drum up a few recruits, for the first blush, tea-scented roses came from China in 1810-12. But the roses that count the most belong to the last half of the nineteenth century!

Do you realize that in 1867 *La France* (not then properly classified) was the first Hybrid Tea rose, and that such wonderful parent Hybrid Perpetual roses as General Jacqueminot and Victor Verdier were not developed until after 1850?

Now that necessity, as well as prudence, are to force us to grow American Roses for America, it is well before we cheer too loudly and acclaim our ability, to read some accurate, but not too technical, history of the progress of rose-growing* in Europe, particularly in England, in order to see exactly what has been done, and with what results.

With this wealth of experience upon which to build, just as we colonists had England's civic laws as models, America, with equal care, should be able to create a type of rose that will grow for the poor as well as for those who have time and money to expend—a People's Rose that shall equal the fragrant *Gloire de Dijon* roses that climb about the cottage eaves of the Old Land and enable every humble gardener to compete at the exhibitions with the lords of the manor. But we must be more careful in the breeding and keeping stock true than we have been with our dogs and cattle, for, alack, we are more prone to achieve than to continue.

Also, the love of roses must enter more universally the hearts of the men as well as of the women of the country, and they must not be ashamed to show it as something "unmanly."

*"The Rose," H. B. Ellwanger, and "Roses and Rose-Growing," by Rose G. Kingsley, are such books.

My English-born Commuter can never understand why so many men look askance at him because he carries flowers to town all the growing season, to give away here and there as he passes. It seems to me that it would be a very good thing if the average American business man (labeled "tired," as he often is) would give half as much energy to rose-growing as he does to boasting how little coal it takes to run his furnace, to watching his electric-light meter in winter, and the stock reports, baseball news, and the thermometer in summer. His soul would expand and his horizon widen beyond belief, which would relieve his mental eye-strain and cause the money-grubbing wrinkles to fade from his tense American face, thus benefiting this too-well-known human type.

This is a rambling excursion, you say! Back to the question—What are the old-fashioned roses; those that we should plant in the Garden of Second Childhood?

First come with me into this garden, and let me tell you what it is, for very few understand. This second childhood, which one can hardly enter before he is fifty, is not a time of dotage, old age, and withered hopes, but the land that one may enter when one has learned to know and love the things that are worth while and lasting, the simple wholesome things that may be enjoyed with the zest of youth strengthened by the wisdom of maturity!

In the Garden of Second Childhood there is no time or room for experiments, either in its flowers or architecture; everything must be a tried, true friend, a real neighbor, while the friendliest plot of all holds the roses of the "Has-beens-that-still-are" type—the Silver Wedding Roses, without a sensationally catalogued, exploited debutante among them.

Here we find some of the earliest Hybrid Perpetuals: General Jacqueminot, Alfred Colomb, Beauty of Waltham, Black Prince, Countess of Oxford, and Fisher Holmes, all glowing reds and crimsons, with Camille de Rohan and Xavier Olibo (now difficult to buy) for depth of hue. Of pinks, Magna Charta, Marie Verdier, Paul Neyron, Gloire de Paris, Silver Queen, and Mrs. John Laing, with Margaret Dickson and Merveille de Lyon for a paler tone, and, if you like white outdoor roses, Kaiserin Auguste Victoria and Frau Karl Druschki.

Of Hybrid Teas not one is more satisfactory than La France, the pioneer of the type. Professionals pass it by for newer varieties, claiming that the color fades quickly in the sun, but in more than one little tended garden it has proved itself "real folks," and if on its own roots and planted in deep, heavy loam, where tree-shadows (not overhead shade) fall on it in early afternoon, it will make great, 6-foot-high bushes, like a hardy shrub, and yield endless masses of fragrance. If you don't believe it, such may be seen any summer on a hilltop garden at Montmoor, state of New York.

A few *Rugosa* roses may be admitted. Supposedly a new type, they entered England in the original form in 1784, being only seen in white and pink. In 1900, crossed with *Gloire de Dijon*, Conrad Ferdinand Meyer was the eldest son of a wonderful race whose American career has only just begun, together with that of the Rambler tribe, that, when its scentless, papery quality has been hybridized away, may produce the American rose of promise.

But in the Garden of Second Childhood no Crimson Rambler may enter, for to the Commuter and his wife they represent merely flaunting, vain heartlessness; for is not fragrance the heart and soul of a rose?

Tea roses there are in this garden—really old-fashioned Teas—that are humored to real hardiness, all varieties of the last century and all the more lovable for their elusiveness: *Souvenir d'un Ami*, *Devoniensis*, dating back to 1846, *Le Pactole*, *Safrano*, *Papa Gontier*, *Bon Silene*, the *Cochet* family, *Perle des Jardins*, and *Niphetos*, the pointed buds of which, set stiffly amid heliotrope, and edged with silver paper, figured in our girlhood bouquets, together with *Isabella Sprunt*.

The white Bride and pink Bridesmaid of this century are also favorites and have proven themselves prolific bud-yielders if partly shaded after the manner of *La France*. In fact, all Teas and Hybrid Teas, in this climate of intense sunlight, should be shielded at some time of day and gathered when in rather close bud.

In this garden there are also some roses that belong to various tribes, that have place because they are memories of first childhood: *Souvenir de la Malmaison*, a profuse bloomer, an

exquisite flesh-pink when in bud, but sometimes dubbed "pie-face" when the flat, many-petaled flowers open; very prone to lose its head on slight provocation, yet very lovable for all that; old climbers like Baltimore Belle and Queen of the Prairies and Felicity, with its white clusters.

Then there is the patient pink Hermosa, quite ordinary and unexciting, but liberal in yield and cherished as being the first "really own" rose the Commuter's wife possessed as a child, having been an Easter plant given at Sunday-school.

Of the dainty Polyanthas, Cecile Brunner, and warm-hearted Marie Pavie have stood the "worth-while test," but Clotilde Soupert was long since turned out of this Eden because she was too lazy to tend and open her buds properly, and, after much promise, presented dropsical yet constricted blossoms that blighted instead of bloomed.

The Garden of Second Childhood that I ken so well is getting over full, so that the gate is closing perforce; and yet, being an American garden, it guesses that when the time comes a place will be made therein for a few tried and true American-bred and -born roses, since already inside the fence Silver Moon is casting her alluring beams toward Dr. Van Fleet, while American Pillar, looking out of the corners of her starry eyes, maintains a discreet and blushing silence!

WHAT IS YOUR FAVORITE ROSE?

"Barbara" tells of roses that strike the chords of remembrance for the Editor. Safrano, Hermosa, Devoniensis, Papa Gontier, Prince Camille de Roban, Fisber Holmes—all these loom bright in memory. And those she has not mentioned, of the Editor's early rose-days—Sombreuil, which opened its buds with a spring, and kept its perfect open flower for a week; Comtesse Riza du Parc, from the one greenhouse plant of which there might always be picked a bud for "the one girl!"

Readers of the Annual who are willing to admit to a rose-experience of a generation of time, What are your roses of precious memory? Won't you tell the Editor, and let him tell your rose-friends?

Outdoor Rose-Growing as a Recreation

By REV. EDMUND M. MILLS, Litt.D., Syracuse, N. Y.

EDITOR'S NOTE.—If ever there is a university that gives degrees of the spirit of roses, Dr. Mills will have its signifying letters follow his name, for surely he is a Doctor of Roses in the finest sense! To have seen him greeting other grand old men of the rose; to have attended a meeting of the Syracuse Rose Society with him presiding; to have enjoyed his enjoyment upon such a great rose occasion as that in Captain Thomas' garden in June, 1919—these are the criteria that would warrant such a degree.

Last year Mr. George R. Mann told us why he grew roses instead of playing golf. Dr. Mills now gives us reason for his rose-love, but he does not mention the way in which it provides him with energy-renewal as he puts his large district "over the top" in a world-reaching Centenary campaign, or serves as acting secretary of the General Conference of the Methodist Episcopal Church. Nor does he suggest his own proficiency as a swimmer, which would give him athletic fame did he desire it.

IF THE way a man spends his money is an acid test of what kind of man he is, then the way he spends his spare time—the time that he calls his own—not only shows what manner of man he is, but goes far in determining what he will become. Our amusements or recreations indicate not only where we are but also in what direction we are going. The spectators of the ancient gladiatorial shows became almost as coarse and brutal and cruel as the contestants themselves. What can be hoped for from a nation, or from the individuals that compose it, whose most prized and best patronized sport is bull-fighting?

I assume that everyone needs some kind of recreation. Hardening of the arteries is no more fatal to physical health than inability to talk or think of anything but "shop" is to mental fruitfulness and freshness. He who would have "the abundant life," if he is wise, must not only cultivate love for the good and true, but also for the beautiful. Recreations should nourish "body, soul, and spirit." The ideal recreation must be inexpensive—that is, within reach of the average man and woman—capable of enlisting and retaining interest, of cultivating imagination and sentiment, and have the least possible attendant dangers.

Some sports are so violent as to be perilous to the body; others are so frivolous that only imbeciles can have any excuse for wasting time on them; and still others have such an environ-

ment of evil that those who indulge in them put their manners and morals in jeopardy.

Cowley says, "God the first garden made; and the first city, Cain!" Bacon also declares, "God Almighty first planted a garden." There Adam was healthy and happy. The conditions under which his Maker first placed him must still be favorable to man's well-being. How many have found in a rose-garden a hint of the far-off Eden! The poet who asks or exclaims "What is so rare as a day in June!" might have been more specific and inquired, "What is so lovely as a perfect morning in June in a rose-garden?" It probably was in a rose-garden that Wilberforce wrote of "Roses, the smiles of God's goodness."

By these standards let us test garden rose-growing as a recreation. Plenty of moderate outdoor exercise promotes physical well-being. An hour a day through the spring and summer, digging in the earth and breathing good air, has in many instances averted a painful and costly visit to a sanitarium.

Many recreations we soon tire of or outgrow, but who ever knew a real rose-lover to lose his interest in rose-growing? Gladstone and George Eliot and George Bancroft were as ardent rose-lovers in old age as when "the passion of youth" was upon them. Gladstone at eighty years of age seldom appeared in public without his white rose. George Eliot has not only many references to roses in her writings, but she had them in her heart and her garden. She it was who wrote: "It never rains roses; when we want more roses we must plant more trees." The dean of American amateur rose-growing, Dr. Robert Huey, of Philadelphia, probably never vowed before witnesses to love the rose "till death doth us part," but no earthly divorce court will sever him from the love of his youth!

I have been writing of outdoor rose-growing by amateurs, but the law "once a rose-lover always a rose-lover" holds good of not a few who "make a business" of rose-growing for the trade. The dean of American professional rose-growers, John Cook, of Baltimore, and "Our Brother of the Roses," E. Gurney Hill, of Richmond, Ind., are first of all rose-lovers and will always be rose-lovers. Some recreations must be abandoned when the eye grows dim and the step uncertain and slow, but one can grow roses as long as he can do anything.

The by-products of rose-loving and rose-growing are many. The rose has always been the favorite flower of preachers, poets, painters, and lovers. Beginning with Luther, whose seal was a rose, what a host of men like Dean Hole and Henry Ward Beecher have been votaries of the rose! Where two or three rose-lovers meet together, you will generally find a "man of the cloth." It is impossible to name a great poet who has not sung the praises of the rose. If all the good rose poems of the ages were gathered in one collection it would make a large library. A new volume of verse has been put on the market in 1920. The poet speaks words of truth and soberness when he affirms:

"Oh, not a poet lives but knows
The laughing beauty of the rose."

Painters have not been one whit behind poets in their devotion to the Queen of Flowers. Ever since Adam gave Eve a rose, lovers have been "telling it with a rose."

But time will fail me to tell of the rose in history, the rose in romance, the rose in strange customs. For two score and ten years, nearly, the writer has lived in many parsonage homes, but his rose-garden has always been his faithful fellow-pilgrim. And when the days of rest come from active life, please God, it is his dream, on the shore of that great ocean that "with its solemn pulses feeds the arteries of the oldest and mightiest of the nations of the old world," we shall not be divided!

*There is nothing outside of Heaven as
beautiful as the rose; and in growing roses the
perfectness of being is given—so innocent keeps
the heart, so raised and so sweet!*

—MISS JENNIE LONG
(Who grows roses)

A Visit to the Home of the Gloire de Dijon Rose

By JOHN C. WISTER, Germantown, Philadelphia, Pa.

EDITOR'S NOTE.—It happens that one of the rose memories—a half-century old, to be sure—of the Editor is of one wonderful Gloire de Dijon rose in his father's greenhouse, and another great plant outdoors on a sheltered wall, lovely in its blooming-time. Captain Thomas' article in the 1919 Annual, to which Mr. Wister refers, renewed these memories, and it will be found, on reference to page 46 of this Annual, that the same Gloire de Dijon is prized highly in Norwegian gardens.

Some of the younger rose-lovers may not know this splendid old climbing Tea rose, which seems to be far hardier than its class indicates. To make acquaintance with it feasible, the description printed in the Catalogue of the National Rose Society (of England) for 1917 is here reprinted:

"Gloire de Dijon (T.), Jacotot, 1850.—Buff, or salmon-yellow. Vigorous climber. Garden, standard, bush, pergola, town, pegging down, wall. A most useful climbing rose. Very fragrant."

It will thus be noted that this seventy-year old friend is in England given for about all known rose uses. Might it not prove a valuable parent for some new climbing roses of the type Captain Thomas has described in this Annual?

THE article, "Wayside Roses in France," by Captain Thomas, in the 1919 American Rose Annual, delighted me especially, because I had so many similar experiences, in all parts of France, during my eighteen months' service in the A.E.F., and because my first visit to a French garden was to the home of the famous rose which he found growing on the house of the station gate-keeper, the Gloire de Dijon.

After two weeks in the steerage of an army transport, and two weeks of quarantine in a bitterly cold French camp, the last Sunday of December, 1917, found us in the railroad station of Dijon, with five hours between trains. As soon as our eyes lighted upon the sign "Dijon," one of my friends and I made up our minds to visit the home of the rose, which I had grown and admired for so many years, but when we started out I was dismayed to find that I had forgotten the originator's name. It did not occur to us, however, that we would have any trouble finding such a famous place, until we had, in our very bad French, asked the way of several shopkeepers. They were very polite—"Yes, there were nurseries in Dijon; which one did we want to see? Roses? Yes, they all grew roses!" After getting

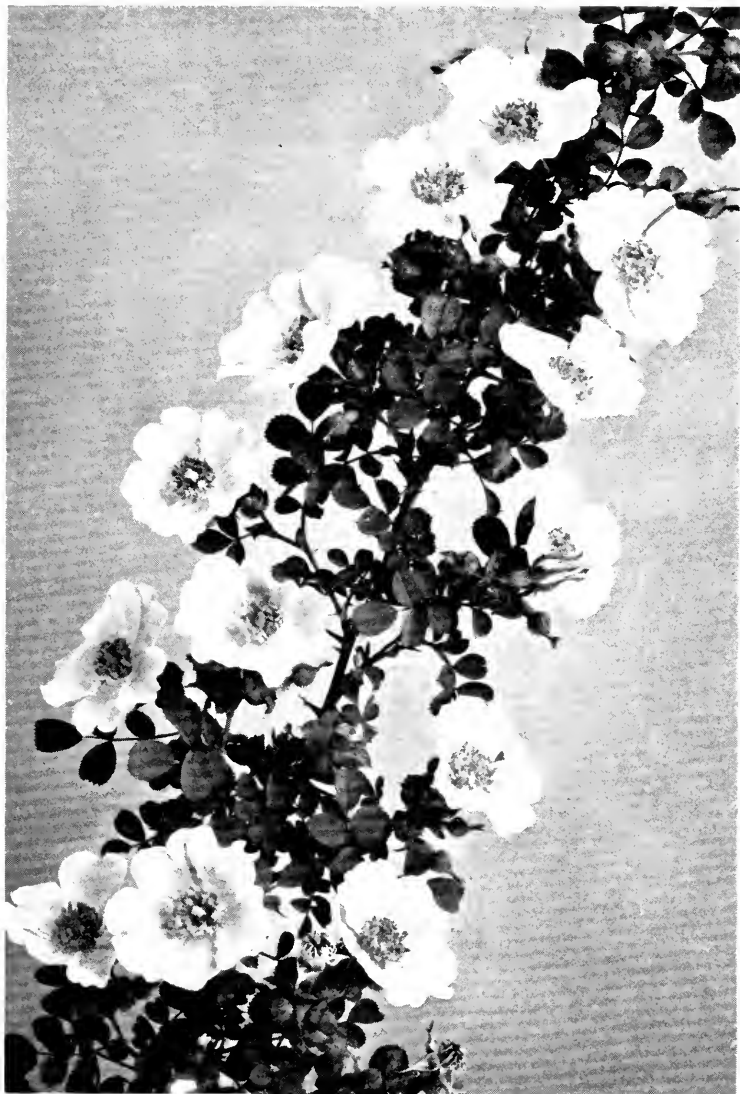


PLATE IV. The Chinese Species, *ROSA MULTIBRACTEATA*
(Photographed in the Editor's garden)
(See page 24)

these answers in four or five places, we gave it up and began to search blindly. Luck was with us, for after walking about an hour, we turned a corner, and beheld, painted in large letters on the brick wall of the house opposite, "Jacotot, Horticulteur." Like a flash, the name I had been trying to remember came back to me, and we crossed the street, entered the little gate, and walked toward the house.

The brick walk leading from the gate to the house divided the little enclosure in half. On the right was a formal rose-garden, 60 or 80 feet wide, and perhaps a hundred long, with little rectangular beds, having standard (tree) roses marking their corners, and with occasional arches or posts for climbers, these two types of roses standing out boldly while the dwarfer roses were mostly hidden with snow. On the left were three greenhouses, about 18 by 50 feet each, and between them and beyond them, roses and other plants in nursery rows.

Entering the little office, we announced that we were American soldiers, interested in roses, and that we would like to see the original vine of Gloire de Dijon, which we knew well in America. A woman, who told us she was Jacotot's daughter, greeted us, and took us outside and showed us an old climbing rose, which, however, hardly seemed old enough to be the original vine, unless it had been pruned so severely as to leave no trace of old wood. Then she took us into the greenhouses, which were indeed a pitiable sight. They were of the steep-roof type, with small glass, houses such as are now but seldom seen in this country. The framework, and even the doors and benches were of steel. Owing to fuel restrictions there was no heat, and the houses were covered with straw mats, so that they were as dark as a cellar, getting light from the ends only.

One could not imagine a worse place for plants, yet here was a collection of plants better than one could find in most American greenhouses. There were a few palms, rubber trees, and other foliage plants; rhododendrons and azaleas for Easter forcing; fuchsias and geraniums; a few chrysanthemums, still holding their faded flowers; pots of bulbs, mostly of narcissi, for Easter bloom (or earlier, if the warm sun should come in March); many varieties of ferns, camellias, laurustinus, sweet olive, and many plants entirely new to me. Most of them, of course, were

not in top-notch condition, but under the circumstances it was marvelous that they had been kept alive at all.

We came away marveling that from this little place could have come a rose so fine, that, after more than sixty years' trial in nearly every civilized country in the world, it is still so grown and loved that it has made a place for itself which but few other roses have ever attained.

Since that cold Sunday in December, 1917, I have visited many other gardens and greenhouses in France, and I know now, as I did not understand then, that the establishment of M. Jacotot is typical of the French nursery and florist business. Possessed of a love for his plants, such as but few American growers have, the Frenchman prefers to grow a few plants of many species and varieties, rather than many plants of a few varieties, and he is content to work all his life on a small place and hand his small business down to his children, who in their turn will hand it down to their children. If the business prospers they may indeed procure a few acres out of the town on which to grow their larger plants, but the old garden and greenhouse will go down from generation to generation unchanged, as will many of the varieties of plants which are being grown. It is from gardens such as these that we have had, during the past hundred years, an endless succession of fine varieties of roses, herbaceous plants, greenhouse plants, fruits, vegetables, and ornamental trees and shrubs. As our American plant-breeders make us less and less dependent upon the Old World for our supply of improved forms of plants, let us not forget that no small part of their success is due to the improved forms they have been able to use as parents, forms which we owe to the Old-World gardeners like Jacotot of Dijon.

THE ROSE IN PLATE III

But to justify the picture shown facing page 13, the Editor transcribes here the note recorded of it June 28, 1919: "Lovely large flowers, enduring hot sun well, and very double; color delicate pink, with deeper center and salmon shades. By all means the finest climber of its type." This yet unnamed rose was originated by Dr. W. Van Fleet, and is a hybrid between Rosa Wichuraiana and Duchess of Wellington.

Rose-Breeding Notes for 1919

By DR. W. VAN FLEET

Department of Agriculture, Washington, D. C.

EDITOR'S NOTE.—It is not only the inherent interest of these notes, but their continuity, that gives them unique value. They should be read in connection with similar notes by Dr. Van Fleet in the *Annals* for 1916, 1917, 1918, and 1919, in order to appreciate their relation to world-progress in rose improvement. A recent comprehensive inquiry addressed to all the important known rose-hybridists has convinced the Editor that Dr. Van Fleet alone is intelligently, persistently, and scientifically adventuring in the development of the different and important Chinese native species from which may arise, in earlier or later succession, the improved hardy garden roses so much needed.

It is no derogation of the efforts of the commercial workers in roses primarily bred for greenhouse growing, nor of the superb work of Captain Thomas toward hardy everblooming climbing roses (fully reported and illustrated in this *Annual*), to say that Dr. Van Fleet is the present and potential originator of the varieties which may truly be called "American" roses.

Attention is directed, in illustration of this article, to Plates III, V, VI, and VII, and to the portrait of this great hybridist, printed as Plate II.

Attention is also directed, in view of Dr. Van Fleet's last paragraph, to the efforts of the American Rose Society, to suitably arrange for the dissemination of the fine new varieties referred to on page 29.

THE past season was far from ideal for rose-breeding. The blooming period was interrupted by long rains, interspersed with heat-waves that made pollination more than ordinarily precarious, and, in addition, the rose-chafer, or beetle, appeared in incredible numbers, destroying foliage and pollinated fruits as well as the flowers of many varieties much desired for breeding. The most trying feature of the season was the surprising amount of damage caused by the seventeen-year locust or cicada, which appeared to specialize on the upright canes of the new Chinese roses for their egg-laying operations, with consequent splitting of the stems, stunting of growth, and causing, in no inconsiderable number of cases, their breaking down and the total loss of hybridized fruits before maturity. This trouble was to a great extent avoided in the later pollinations by selecting blooms on small and low branches less likely to be attacked, but the net result of this invasion was a material loss in the season's work and the total destruction of certain combinations difficult to secure, which, however, we hope to again effect in coming years. The seventeen-year locust pest is not again due in this locality until 1936. The other troubles we

always have with us, and full precautions will be taken to minimize their effects in future work.

Notwithstanding the seasonal difficulties, a very considerable number of pollinations among the new or little-used species and rarer varieties have yielded good seeds and may favorably be heard of in coming years. Best results were had with *Rosa Gentiliana*, *R. bella*, *R. Helenæ*, *R. sertata*, *R. Jackii*, *R. omeiensis*, *R. banksiopsis*, *R. saturata*, *R. Sweginzowii*, *R. multiflora cathayensis*, *R. filipes*, and *R. multibracteata*,* all from north or central China, though quite a number of other varieties from Asia and western North America matured hybridized fruits or furnished a few successful pollinations with other species or varieties. In all these crossings, habit of plant, quality and season of bloom, and relative hardiness, or disease-resistance, were taken into account in planning the matings, and in most cases a variety with superior blooms for its class was used as seed or pollen parent. It seems reasonable to expect useful results from this basic work in the way of laying foundations of future valuable hardy rose strains for America.

Of the new species mentioned, *Rosa Gentiliana* and *R. Helenæ* appear to hold greatest promise. *Rosa Gentiliana* first blossomed at Bell Experiment Plot, and possibly in the United States, in 1918, and more profusely the past spring. It may be claimed without qualification to be the most attractive wild climbing rose with white flowers thus far introduced to cultivation. The plant is far from hardy in the latitude of Washington, and will scarcely find really congenial climatic conditions north of the Carolinas, but has endured three winters at Bell with varying loss of branches. It is a strong grower during the warm months, making canes twelve to eighteen feet high in a remarkably short time. It is not a trailer, and should be given support on a south wall or other well-protected situation in cold climates if its full characteristics are to be brought out. In the milder southern states it should succeed anywhere that its rambling growth can be supported, and may even naturalize itself and become a local nuisance, as the Cherokee and Macartney roses have done along the irrigating ditches and levees of Louisiana and Texas. The foliage is large, abundant, and

*See Plate IV, facing page 20 for *Rosa multibracteata*.



PLATE V. *ROSA MOYESII*, the Deep Red Chinese Native Species
(See page 25)

glossy, with a peculiar reddish reflex to the under surface of the leaflets, and the fair-sized snow-white blooms are borne in spring in such astonishing abundance as to give the plants the appearance of a veritable snowdrift. The individual flowers greatly resemble in form, size, and purity the blooms of the large mock orange, *Philadelphus grandiflorus*, or, more correctly, *P. inodorus*, and have, in addition, a pleasing fragrance that is lacking in that scentless shrub. They are thickly placed in large clusters all along the canes and are quite lasting in their snowdrift effect, as the stamens are few and small and do not disfigure the older blooms as do those of the white *Wichuraiana* and *Multiflora* varieties. A good crop of deep red hips follow and retain their bright color well through the winter. Whether this fine species can be altered for the better by breeding into it greater hardiness is a problem for the future.

Rosa Helenæ is a climbing species of the Musk rose group, but much hardier than *R. Gentiliana*, as it thrives vigorously as far north as the Arnold Arboretum in Boston. The white blooms are produced in June almost as freely as those of *R. Gentiliana*, but are less pure in color-effect, as the abundant yellow anthers in fading soon mar the clusters. It is, however, a most desirable wild rose, fitted for culture over a wide area, and appears to cross almost as readily with other species and varieties as *R. Wichuraiana*. One hybrid, *R. Helenæ* pollinated with the Tea rose, *Isabella Sprunt*, has bloomed, giving a pretty, double white bloom with yellow base, in good-sized clusters. The plant is a strong, healthy rambler, quite comparable to *Thalia*; but something more striking in appearance than this newcomer will be needed before *R. Helenæ* hybrids take a conspicuous place on the map.

Of the newer species, *R. bella* and *R. multibracteata* are most enticing, the former for its dwarf habit and profusion of bright cherry-red blooms, and the latter for its fine, distinct foliage and graceful sprays of late-opening pink flowers. Both are shy seeders at Bell and reluctant to cross with other roses, but have matured some hybrid seeds. The latter species is illustrated in this issue of the Annual, facing page 20.

Of the more familiar species, *R. Moyesii* must take first place on account of the superb deep red coloring of its blooms. It

has been termed, in England, where it was first cultivated, "an epoch-making rose," and in our view it well deserves the title, as it is the most striking in color-effect of the Oriental wild roses that has come to notice. It has flowered at Bell four seasons, and each year deepens the impression of its great possibilities. The few direct seedlings and hybrids of *R. Moyesii* that flowered the past summer have shown no charms greater than the type, except in the fine cinnamon-red color of the winter canes in one variety; but the pollen hybrids of *R. Moyesii* with *R. arkansana*, *R. canina*, *R. Engelmannii*, *R. Fendleri*, *R. Malyi*, *R. rugosa*, and *R. Wichuraiana* open new visions of beauty in garden roses of the more robust types. Of these the crosses with *R. canina*, *R. Engelmannii*, and *R. Wichuraiana* are the most alluring at the present outlook, though further developments may change this rating. *Rosa Wichuraiana* × *R. Moyesii* was described in the 1919 Rose Annual under the tentative designation of "W. M. 5." Another season of bloom confirms our estimate of the value of this novelty. There is little indication of *R. Moyesii* in the plant except in the large black-crimson blooms with deep red filaments, borne in the greatest profusion in spring and again to a considerable extent in autumn, followed by large and particularly glossy red fruits. It is very healthy and hardy, and should make an exceptionally attractive pillar rose*.

The hybrids of *R. canina* and *R. Moyesii* in their second year show great promise, having a sturdy, arching habit, handsome foliage intermediate in form between the parents, and large, fiery crimson, wide-opened flowers in open sprays near the tips of the branches. The anthers and stamens are golden yellow, relieving the blooms from the somber effect seen in the extreme forms of *R. Moyesii*, such as the variety sent out in England under the name of *R. Fargesii*, in which the filaments are maroon and the anthers dull red-brown. The flowers of the *R. canina-R. Moyesii* blends reflect more light and give a far more brilliant effect than those of the typical *R. Moyesii*, and may in older plants be more freely produced.

The finest of all the *R. Moyesii* hybrids, from present appearance, are the *R. Engelmannii* crosses. Five excellent varieties,

*See Plate, V, opposite, photographed from a plant growing in the Editor's garden.



PLATE VI. New Hybrid Rose, "W. M. No. 5" (unnamed *Wichuraiana*-*Setigera* Hybrid \times *R. Moyesii*). Originated by Dr. W. Van Fleet
(See page 26)

differing in brilliancy of tint and habit of plant, have appeared among the numerous seedlings under way. All were profuse bloomers at two years from germination, bearing flowers of the brightest reds imaginable, with conspicuous yellow stamens, the bloom coming solitary or in pairs in short twigs over the entire plant. The flowers are large, well-shaped, and lasting, giving an especially glowing effect against the deep bluish green foliage, which is in form more like that of *R. Moyesii* than that of the seed parent. The succeeding fruits are pear-shaped and remarkably large, becoming bright orange-red in maturity. These varieties will probably form strong clumps of canes five or more feet high in the next year or two, and, in common with the Dog-Rose hybrids of *R. Moyesii*, will readily be propagated by layers, which are already produced with freedom.

Rosa Engelmannii is a little-known Rocky Mountain wild rose of neat, erect habit, and bears, in the form under cultivation at Bell, the most cheerful red flowers of any American species. All of the other *R. Moyesii* hybrids show promise for future development, if not for immediate dissemination. *Rosa Moyesii* itself is indispensable in any considerable rose collection, and will always center attention when in bloom or fruit. It makes the tallest growth of any non-climbing rose at Bell, the erect canes reaching eight feet in height in a season, but is not especially free in the production of its unique and elegant flowers, and, in addition, is most difficult to propagate, except by grafting on *R. canina* and *R. Manettii* stocks, which seems to render it short-lived.

We are trying to extend the hybridizations through the entire range of congenial species and highly developed garden varieties that do not too greatly conflict in habit and coloring. Flowers of *R. Moyesii* and all hybrids yet developed to the blooming stage are devoid of fragrance, and their charms will likely continue in the lively coloring and graceful forms. Attractive double blooms of the *R. Moyesii* type are scarcely to be anticipated, but may eventually come to pass.

Rosa Hugonis continues a difficult subject. While fruiting with the greatest freedom, few of the very numerous seeds germinate, whether cross-, self- or chance-pollinated. We have,

however, about three hundred seedlings under way, the most desirable from the present outlook being hybrids of *R. altaica* and *R. hispida*, both geographical variants of the Scotch rose, *R. spinosissima*. The ultimate appearance of these newcomers can only be imagined, as few are more than three years old. If their growth continues after the general pattern of *R. Hugonis*, we may anticipate luxuriant shrubs for hedging and specimen planting, six to eight feet high, in early spring completely wreathed with cream-white to canary-yellow flowers nearly four inches across, and so thickly placed as to touch all over the branches, being succeeded by glossy, fern-like foliage, and in August by a profusion of red or black fruits, often of considerable size. A few of the hybrids have blooms of deeper yellow than *R. Hugonis*, but the larger-flowered varieties run lighter in color, like their pollen parents. There is considerable difference in habit, some having comparatively drooping branchlets and others upright shoots, bearing gorgeous wands of bloom in their season. These combinations are of iron-clad hardiness, never losing even a terminal bud from zero weather, and we appear justified in expecting from them some thoroughly worthwhile early garden varieties.

Hybrids of *R. Hugonis* with the Rugosa roses develop into vigorous bushes with rank, green foliage and large, light yellow or white blooms, double and single, rarely followed by fruits. While fine and distinct plants, the flowers lack the texture and finish of the *R. Hugonis-R. spinosissima* crosses, and must take second rank. Hybrids of *R. Hugonis* with rose varieties of the florist's types, as far as bloomed, bear flowers more curious than beautiful and often are very poor growers. This may also be said of the blends of *R. Hugonis* and the Persian Yellow varieties, though much was expected from the combination of these oriental types of hardy yellow roses.

Rosa xanthina, the late Frank N. Meyer's hardy Chinese yellow rose, is even less encouraging than *R. Hugonis*. Seedlings and hybrids give blooms ranging from white to sulphur-yellow, with an occasional double form having flowers much like Harison's Yellow, but they show little advance in the type. The bush, however, is very sturdy, and the young shoots often have showy, wide, dark red, translucent prickles like certain

forms of *R. sericea*. Let us hope *R. xanthina* will do better in the future.

Another seedling of Harison's Yellow has bloomed, the flowers taking the form of an inferior, semi-double, salmon-pink Scotch rose, thus carrying out the idea of the preponderance of *R. spinosissima* rather than Persian Yellow on the parentage. The seedling described in the 1919 Annual was very fine this year, exceeding Harison's Yellow in abundance of bloom and maturing several fruits, all carefully pollinated with other yellow varieties. As noted, the color is a shade lighter and the texture of petal firmer, but in other respects this promising variety greatly resembles its seed-parent, though more fruitful.

This entire group of hardy Asiatic yellow roses has promise for the garden, but except by extreme dilution—as in the case of the *R. Pernetiana* type of bedding varieties—shows little tendency to develop the ideal buttercup-yellow continuous-blooming bush and climbing roses we all desire. When they materialize, as in all probability they will in the fullness of time, it will more likely be as mutations or developments of the Tea and Musk rose groups, though at present these are generally lacking in hardiness. Possibly the ideal yellow rose may be a final blend of nearly all the species having yellowish blooms.

The utility of *R. Soulieana* has been mentioned in previous notes. While the type of this vigorous, free-blooming member of the Musk rose group is far from hardy, hybridization with appropriate species gives progeny highly resistant to cold. One desirable variety, "W. S. 18,"* was briefly described in 1919 and more than holds our good opinion. Another very dwarf constant-blooming hybrid has appeared, rivaling the best of the white-flowered "Baby Ramblers" in continuity, profusion, and perfection of bloom. The flowers are double, white with sulphur-yellow base to the petals, and cover the plant throughout the whole growing season.

Of all species, however, *R. Wichuraiana* gives the most satisfactory direct results when pollinated with superior florist's and bedding roses. Several most attractive new varieties that should measure up with the best of their class await at Bell some equitable method of general introduction, and it is likely

*See Plate VII, facing page 31, for "W. S. 18"

more will follow; but the work here is primarily not in competition with professional and amateur rosarians in the production of garden novelties, but in the utilization of rare and little-known species in laying the foundation of strains of disease-resistant and hardy roses adapted for the diverse climatic and soil conditions of our vast country. Although immediate results may not be impressive, it is not without hope that development of these new types will continue, and yield rich rewards as long as civilization endures.

Making Dr. Van Fleet's Roses Available

By THE EDITOR

AS will be noted on page 29, Dr. Van Fleet speaks of certain of his productions which are now awaiting a method of dissemination. The existing plan for sending out the very many valuable plants largely brought from abroad by the agents of the Bureau of Plant Industry in the Federal Department of Agriculture is to list these plants in bulletins which are sent to all inquirers, and to supply plants, as far as practicable, to those offering to take charge of them.

This method, which is of tried utility in respect to foreign introductions, tends on the contrary to slow up the distribution of a new rose produced in America. With the desire, therefore, to make available Dr. Van Fleet's superb creations, many consultations have been had with and much correspondence has passed between the officials of the Bureau of Plant Industry and the officers of the American Rose Society. The disposition of the officials has been altogether that of coöperation, and the only real obstacle to a satisfactory arrangement has been the fear, justified by experience, of drastic political criticism based on a narrow view of Congressional privilege.

That there is very distinct hope of effecting a new and satisfactory arrangement is made evident by the subjoined letter from Dr. William A. Taylor, Chief of the Bureau of Plant Industry, who has jurisdiction under the Secretary of Agriculture:

Dear Mr. McFarland:

WASHINGTON, D. C., February 11, 1920

Responding to your recent inquiry regarding the possibility of systematic coöperation by the American Rose Society in the dissemination of new rose



PLATE VII. New Hybrid Rose, "W. S. 18" (*Rosa Wichuraiana* \times *R. Soulieana*)
Originated by Dr. W. Van Fleet
(See page 29)

varieties which are being developed by the Bureau, particularly in the rose-breeding work prosecuted by Dr. Walter Van Fleet, I would say that we have for some time realized that it is very desirable that after the initial tests of such new varieties have demonstrated their probable value for general planting, there be developed some organized method through which the public can readily obtain the new varieties true to name and at reasonable cost.

Theoretically, this could be accomplished by a free distribution by the Department on a sufficiently large scale to make stock of a new variety available simultaneously to a large number of rose-growers and nurserymen. In actual practice, however, it is recognized that the most prompt and effective dissemination comes where a given desirable novelty is vigorously advertised and given that type of publicity through which the public become promptly and definitely interested in the variety.

It is, of course, not possible for the Department to enter into any exclusive disseminating contract, even with such an altruistic and non-commercial organization as the American Rose Society, but it appears probable that some plan can be developed through which the Rose Society could take an active part in the general propagation and dissemination of varieties that are ready to disseminate.

Certain legal questions are involved which will need to be worked out, but we are hopeful that this can be accomplished in a way that will permit of some practical coöperative relation with your Society in this matter.

Yours very truly,

WM. A. TAYLOR, Chief of Bureau.

Colonel Roosevelt's Favorite Rose

By THE EDITOR

AS the months go by since Theodore Roosevelt passed from active participation in the affairs of the land he loved and served so well, the interest of the American people in everything he said, wrote, or did, seems to increase rather than to decrease. His vivid personality, his rugged honesty, his love for the square deal, his willingness to see both sides of a case, all now loom up much more strongly than they did when he was in the heat of contest and conflict for the public welfare.

It has seemed to me, a printer and an admirer of Benjamin Franklin, one of the very greatest Americans, that a curious similarity exists between the characters of these two great men. Benjamin Franklin, living two hundred years ago, came of educated ancestry, as did Theodore Roosevelt. Franklin was an omnivorous reader and chased knowledge all his long life, being, therefore, not only a well-informed man of his time, but with

the deeply prophetic quality which we are now coming to recognize as also characteristic of Theodore Roosevelt, who also was an extraordinary reader, having probably a greater grasp on the literature of the world at the time of his death, as well as a more intimate acquaintance with its governmental methods and ideals, than any other man of his time. Both were close observers; both given to frankness; both had a sense of humor; each did notable and indispensable service to his country.

Upon one of the many memorable visits to the White House while Roosevelt was President, I saw him take from a vase on his desk a cluster of beautiful roses and present them graciously to a lady who was among the callers of the day. The way he handled these roses, inhaling their fragrance as he passed them to his friend, convinced me that he loved roses. The story one of my own intimate associates told me of his absolute familiarity with every native plant about his home at Sagamore Hill added to my feeling that while, of course, he loved roses in general, he probably had a favorite rose.

Application was therefore made to Mrs. Roosevelt as to what was the Colonel's favorite rose, and her reply, which follows, will surely be interesting to all rose-lovers:

Dear Mr. McFarland:

SAGAMORE HILL, January 21, 1920

My husband's favorite rose was a very old-fashioned one, which I have found it impossible to get of late—the Duchesse de Brabant her name is. He associated it with his mother's garden and mine. In White House days he usually wore one in the buttonhole of his grey coat—as DeCamp painted him. In the portrait, a blue bowl of the same rose is on the table.

Many thanks for the Rose Annual. This countryside can never cease to mourn Admiral Ward.

Yours very sincerely,

EDITH KERMIT ROOSEVELT.

In explanation of Mrs. Roosevelt's last paragraph it ought to be said that Admiral Aaron Ward, of famous rose memory, whose memorial was presented in the 1919 American Rose Annual, was a neighbor of the people who live at Sagamore Hill, as well as a lifelong friend of the man whom Kipling properly called "Greatheart."

It is believed that a substantial showing of Duchesse de Brabant will be made somewhere in the public grounds of Washington, as a memorial to Colonel Roosevelt. Why not have a Roosevelt bed in every public rose-garden?



PLATE VIII. New American Hardy Climbing Rose, DR. HUEY
Originated by Capt. George C. Thomas, Jr.
(See page 37)

The Hardy Everblooming Climber

By GEORGE C. THOMAS, JR.

Author of "The Practical Book of Outdoor Rose-Growing"

EDITOR'S NOTE.—Captain Thomas has been an important contributor to the American Rose Annual in each of its four previous issues. His succinct account, illustrated so fully in color and sepia, of his adventure toward the hardy everblooming climber for the Middle Atlantic States will be read, therefore, with greater appreciation. He is doing great service to rose-growing in America. Secretary White's account of the notable rose-day in June last at Captain Thomas' magnificent gardens (see page 105) will but add to the interest of the presentation. Elsewhere (page 107) will be found an account of the Portland awards to one of the roses mentioned.

IN 1914, when the first edition of "The Practical Book of Outdoor Rose-Growing" was published, two facts regarding the lists of roses available to the public were most apparent: First, there were too many varieties offered which were of a great sameness and many of which were inferior; second, there was a decided need for one particular type of rose not then produced.

The book above referred to and its following editions were designed to answer the first condition above noted by advising which varieties to procure. To supply the second need was a much harder proposition, and a brief sketch of the writer's experiments to this end is the object of this article.

The type of rose needed and constantly asked for was that of a climber which in the climate of the Middle Atlantic States and other sections of like conditions would resist the cold of winter and give a blooming season during the entire summer.

Such a production would be of no use in most parts of California and the South, where the climbing Teas and Noisettes already furnished the desired rose; nor would it likely be possible that it would be of use too far North, because the blooming season there is shorter and more spread out for existing hardy climbers. Further, on account of the extreme cold of winter, the chance of success in the northern sections would be smaller. Presumably, parts of the Pacific Northwest could also grow some of the strongest everblooming climbers noted.

The term "hardy everblooming climber" was in reality a misnomer as applied to the rose world at large, for some

climates had it while other climates did not. Indeed, it was only really needed in the Middle Atlantic States and places with like conditions, including, however, the centers of American rose-growing. In the southern part of this section, roses on the order of Gloire de Dijon and the best of the Hybrid Tea climbers, given some winter protection, came near fulfilling the requirements. There was, however, a very decided and extensive need for a constant-blooming climbing rose that was hardy in this one particular district. In the endeavor to breed such a rose, the limitations of its usefulness, as explained, were thoroughly understood.

Since 1914, a number of roses have been brought out by foreign introducers, which, to a small extent, accomplish the wished-for result, but many more have been bred which are absolutely worthless, and none were the final word desired. The climbing sport of Gruss an Teplitz, put out in America, alone may be said to fulfil the conditions, and this rose is absolutely indispensable for this purpose.

The experiments carried out by the writer cover a period from 1912 to the present, with a lapse of two years of war absence, during which earnest employees carried out carefully prepared instructions.

With a garden combining everything obtainable—good, bad, and indifferent—no lack of parents to forefather the new race was present. The years 1912 and 1913 were spent in experiments for the best methods of germination and care of the young rose plant, and the decidedly original departures worked out have been of the greatest value since that time. During the entire process of breeding the method followed was one of elimination. Every variety of climbing rose was used to produce the climbing quality desired, and every kind of everblooming rose was used to produce the everblooming quality desired. Not only were all the newer roses in cultivation tried, but many old and obsolete varieties were obtained from Europe, some of which gave very important results. Furthermore, the list tested contained many wild species.

The best varieties of each class of rose were hybridized, and as soon as a seedling was bred which showed promise, the seed parent which supplied it was used the following year in greater

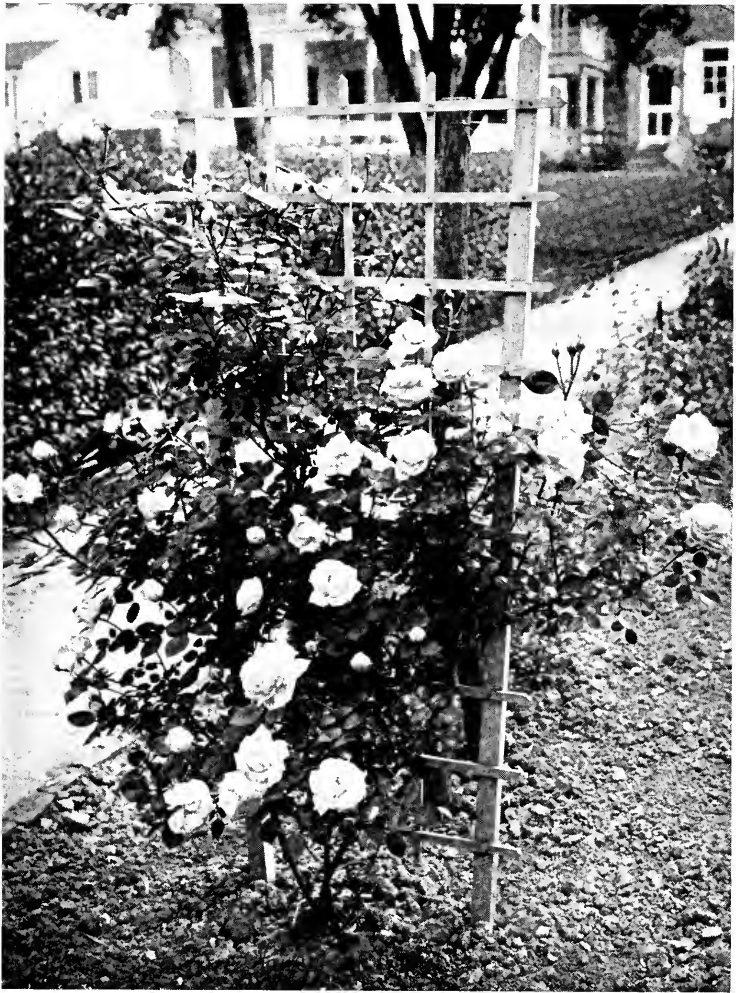


PLATE IX. New Unnamed Semi-Climbing Rose, "4A"
Originated by Capt. George C. Thomas, Jr., and to be Formally Named at
the 1920 Portland (Oregon) Rose Festival
(See page 35; also page 107)



PLATE X. Above, on Right, Unnamed Hardy Everblooming Climbing Rose, "No. 7." (See page 35) Below, Unnamed Everblooming Semi-Climber, "210A, 1915." (See page 37). Both Hybridized by Capt. George C. Thomas, Jr.

quantity and the other seed parents of the same class which produced nothing were eliminated. By this means, a number of seedlings were grown which showed improvement. These, in their turn, were bred with the best seed parents, as noted above, and also among themselves.

At first, seedlings which were everblooming were noticeably lacking in growth, and seedlings which were strong in growth were deficient in everblooming qualities; but gradually, as the experiment worked out, these deficiencies improved until in such a rose as "357A-16" the growth attains a height of seven feet on the young wood, and the blooming season is constant. To a lesser degree, difficulty was discovered in plants which gave fair growth and fair blooming qualities but which were deficient in hardiness; and to still lesser degree, other deficiencies were overcome.

The result has not yet reached the ultimate perfection which may be obtained, but the intricate work necessary to sort out the first crosses from the maze of parents and seedlings is finished, and although the varieties as listed herein closely approach the conditions required, they may be still improved by careful breeding.

In 1914, the first new seedlings of any real promise for the new race were produced. These were four in number, out of a total of several thousand, and contained characteristics which not only stamped them as original, but gave promise that if used in their turn as parents, they might transmit much better qualities to their offspring. This they have since done. The first of these, number "4A," has proved successful in several amateur gardens, but tried for commercial purposes by nurserymen in Connecticut, New Jersey, and California, it failed to come up to their standards and will not be introduced at present. The picture shows the plant as grown by Dr. J. E. Belville, Germantown, Philadelphia, on a trellis five feet high in the spring of 1919, the plant having been put out in 1917. It is only a semi-climber, but if not cut back by pruning it grows to the height noted and gives at times over one hundred blooms at one period, while blooming continuously until heavy frost, besides being very hardy.

Number "7," the second 1914 seedling, of which only the top

of the plant is shown in the illustration, grows to a height of eight feet by early fall and gives three to four distinct periods of bloom during the entire season, with scattering flowers between, ending up in September with blooms at the top of the growth. The picture was taken in September, and the plant is on its own roots. The color of the bloom is bright pink. The variety has never been tested elsewhere.

Lack of space prevents the showing of many other pictures which have as distinctive merit as "4A" and "7," but which for various reasons have not yet passed the final tests necessary to introduction.

The third of these 1914 crosses is also only a semi-climber, but found favor in the eyes of Messrs. Bobbink & Atkins, Rutherford, N. J., and of A. N. Pierson, Inc., of Cromwell, Conn. It has been named "Bloomfield Abundance," and, as the illustration shows, is a most prolific bloomer. This rose has grown to five feet when only thinned in pruning. It blooms constantly from June to heavy frost, and is hardy. The illustration shows a plant one year after setting out; the color of the flowers is salmon-pink.

The last of these 1914 seedlings did well enough at Rutherford, N. J., for Bobbink & Atkins to pass upon favorably, and they are introducing it under the name of "Bloomfield Perpetual," the descriptive part of the name referring to the continued blooms from spring to heavy frost, and not to the word "perpetual" as used in the misleading combination "Hybrid Perpetual." This is a hedge rose which attains a height of five feet, and its pruning should only consist of thinning of dead wood with a necessary cutting off of pods to insure continued blooming. The perfume resembles that of the lovely Cherokee rose, as does the bloom. It is hardy.

These four new varieties were the first steps in the work and are in no way considered as typifying the title of this article; but they are all absolutely distinct varieties, and the illustrations should answer the question as to their decorative and distinctive value.

While these were being tested, many other seedlings were discarded, and a few new ones of merit, which did not bear on the principal object sought after, but which had enough indi-



PLATE XI. New Hardy Everblooming Hedge Rose, **BLOOMFIELD PERPETUAL**
Originated by Capt. George C. Thomas, Jr.
(See page 36)



PLATE XII. New Hardy Everblooming Semi-Climbing Rose,
BLOOMFIELD ABUNDANCE, Originated by Capt. George C. Thomas, Jr.
(See page 36, and also 108)



PLATE XIII. New Hardy Semi-Climbing Rose, "98A, 1916"
Originated by Capt. George C. Thomas, Jr.
(See page 37)



PLATE XIV. New American Hybrid Tea Rose, *Bloomfield Progress*
Originated by Capt. George C. Thomas, Jr.
(See page 37)

viduality to be very valuable, were kept. Of these, the dark carmine climber named after Dr. Huey is being introduced by the two growers mentioned. It has been tested for four years, and is distinct as a large, semi-double, deep red climber of one period of bloom. It is hardy and the color illustration (facing page 33) portrays its beauty. The name for it, "Dr. Huey," was announced at the meeting of the American Rose Society held in the Bloomfield Gardens on June 4, 1919, when the rose created great enthusiasm among the many experts there.

A number of Hybrid Teas were also bred. After repeated tests, only one was considered as of enough special distinction to be introduced, and this rose, a red Hybrid Tea named "Bloomfield Progress," of the color effect of General MacArthur, is being sent out by the Rutherford firm already noted.

In connection with the introduction of our four new roses, it should be stated that the wood was given, not sold, to the firms mentioned, with the provision that the plants be sold to the public at the price of other plants of like kind sold by the same firms, thus insuring the public against the high prices often charged for new varieties. The public should appreciate the action of these firms in putting out these varieties in this manner.

During 1915 and 1916 other seedlings were produced in our experiment grounds which were all distinct advances.

"210A, 1915," was planted in its present position August, 1918, and the photograph was made in June, 1919, with bloom on the wood of the previous year. This variety gives blooms in sprays and singly throughout the entire season, but the height is restricted to four to five feet, although it is hoped it will increase, and, if budded, should, undoubtedly, be stronger; the color is cerise-pink. (See Plate X, facing page 35.)

"98A, 1916," is so beautiful that, while it does not come up to some of the others, it merits description. The color is a deep yellow which does not fade, and the foliage is dark green and glossy. The plant grows to a height of over five feet, but its bloom is not so continued as the remainder of the class—it gives a fine spring bloom, which continues well through July, but only scattering flowers are produced in August, and none later. Budding should improve this rose. (See Plate XIII, facing page 31.)

"66H, 1916," as the color illustration (see frontispiece) shows,

is a large, semi-double, salmon-pink with orange base. The plant on its own roots grows to a height of eight feet, and blooms until the middle of September. This rose comes very close to fulfilling all the required conditions.

As to the three other seedlings to be described, the first of these is "45X, 1916," the photograph of which was taken in September, and, if studied carefully, will reveal blooms at the right, three quarters of the way up the post, and other buds at the top of the two right-hand canes. This variety is silvery pink, with a tinge of yellow, and it bloomed until November. It was grown on its own roots and planted in its present position in August, 1918.

Number "107, 1916," is another everblooming hardy climber, and here again the September photograph shows buds at the top of the canes. The plant is the same age as is "45X, 1916." The double, salmon-pink flowers come in sprays. The plant is on its own roots. (See Plate XVI.)

Last, but not least, is given a color photograph of "357A, 1916." The picture was taken in June, when the plant was something over five feet high. This is the most profuse bloomer of the lot. On its own roots, it grew, by September, to seven feet and bloomed constantly until November. One characteristic of all these varieties is that they bloom more than once on both young and old wood, and are all hardy in the Philadelphia climate. (See Plate XVII.)

The next process in order will be testing other seedlings still further to secure the best. The ones described herein are only a few of the entire number retained as having distinct merit and approximately fulfilling the specifications. Arrangements have been made with Mr. Jesse A. Currey, of Portland, Ore., to test in the Far West, and it is hoped that in the course of the next few years the best of these seedlings may be given to the rose world.*

It should be realized that a hardy everblooming climber cannot be expected to produce flowers in the profusion of the climbers of one period of bloom; but these varieties provide

*Captain Thomas writes later as follows: "Since the article was written, the Andorra Nurseries, of Chestnut Hill, Philadelphia, Pa., have taken all the new seedlings for test and introduction in the East. After the Portland Test-Garden has tested them for Oregon, any which give satisfactory results will be handled in Seattle by the Randall McLoughlin Co., of that city."—EDITOR.

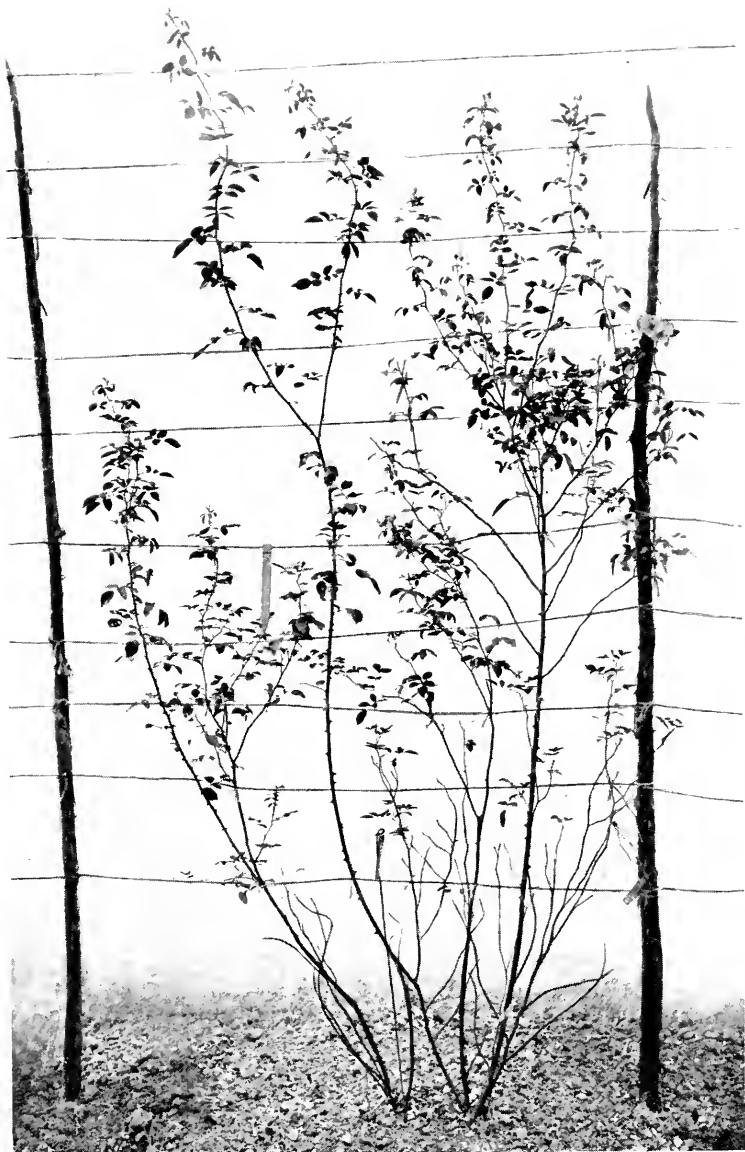


PLATE XV. New Hardy Everblooming Climbing Rose, "45X, 1916,"
Originated by Capt. George C. Thomas, Jr. Photographed in
September, 1919. See Blooms on Right
(See page 38)



PLATE XVI. New Hardy Everblooming Climbing Rose, "107, 1916,"
Originated by Capt. George C. Thomas, Jr. Photographed in
September, 1919. See Buds at Tips of Canes
(See page 38)

enough bloom to give distinct color throughout the entire season to the climbing section of a garden in the Middle Atlantic States.

There is one difficulty which the producer of new varieties must overcome in order to get his roses before the public. Like the writer who must interest the publisher in his story, so the man with the new rose must interest the nurseryman. The nurseryman must see a profit before he will undertake the work of propagating and selling a new variety. As a rule, he also wants to be the only original introducer of the rose in question. Under this arrangement, he can work up a large stock and bring it before the public in his own good time, without competition, and at his own price. Sometimes a man who overcomes all the minor difficulties necessary to hybridize and grow a rose which he considers needed, not to speak of major troubles relating to the same, has almost the hardest part of the operation before him in getting his product marketed, for although, after years of patient effort, with the attendant expense, he secures what he started out to evolve, his new rose may never be widely grown if it does not hit the fancy of a nurseryman.

Yet, it is only fair to the nursery firms to say that they must protect themselves, and see a possible profit in the same way as any other business man before they take up new varieties tendered them by amateurs, no matter how enthusiastic the latter may be. In a way, the public is most to blame, because the public buys what it considers is best for it, and very often it is not capable of judging. If the public clamors for Crimson Rambler, the grower must produce and deliver this rose in order to do business, even if he knows it is inferior to some other variety. If he grows a better rose, he may not sell it.

So, perhaps, the experiment of the hardy everblooming climber, as above outlined, may even in its success be a failure. In any event, it is hoped that the rough draft of the seven years' experiment, as herein set forth, may be of interest to the rose world.

Night-Growth of Roses

By A. W. GREELEY, Williamsport, Pa.

EDITOR'S NOTE.—Last year's Annual included an article on "Winter Work with Roses" by a busy newspaper editor, which attracted much attention. This year the same busy editor gives us another fascinating story, based on his own novel point of view, and adding interest to the work of the rose amateur who cares to develop the idea. It is these "different" things which may be done with roses, more especially by the thoughtful amateur, that give rose-growing such a high rank as a recreation.

AN interrupted, and therefore incomplete, study of certain phases of rose-growth, made during the past summer, points tentatively to the conclusion that from 60 to 80 per cent of rose-cane growth is made during the night. The study was begun with the object of finding the reason for the more favorable results obtained by watering rose-beds in the morning, compared with the relatively unsatisfactory results alleged to follow evening and night watering of roses. As planned, the study involved, among other things, the systematic recording of soil and atmospheric temperatures in two similar beds of roses, one watered in the morning and the other at night and the effect of varying application of fertilizers, sprays, etc., but events made it impossible to carry out the plan in full. However, certain measurements of rose-cane and bud growth, incidental to the general plan of study, but more or less complete in themselves, are rather suggestive, and may prove of some little interest to rosarians in general. These measurements also point to a possible explanation of the fact that better results follow the practice of morning watering of roses.

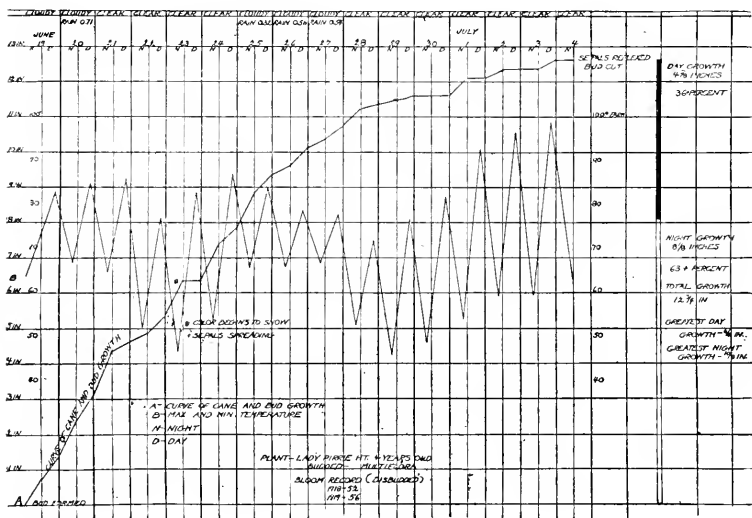
Measurements of cane-growth and bud development were made of a number of varieties of Hybrid Teas from the middle of June to the first few days in July, including in the list a Lady Pirrie, a Radiance, and a Killarney Queen. The growth-chart of a cane of the Lady Pirrie is typical, and the tendencies shown therein are also reflected in varying degrees in the growth-charts of the other varieties. All the plants under observation were vigorous, four-year-old, selected, Multiflora-budded stock, the beds were standard (Thomas), and the cultivation normal. A few days before measurements were made, liquid manure was applied and the beds worked to a depth of three to four inches.



PLATE XVII. New Hardy Everblooming Climbing Rose, "357A, 1916"
Originated by Capt. George C. Thomas, Jr.
(See page 38)

The measurements were begun with the first appearance of a tiny bud on the growing cane.

The outstanding and important fact to be deduced from the Lady Pirrie chart (see below) is that a fraction more than 63 per cent of the cane-growth was made at night, between the recording hours of 7 P.M. and 7 A.M., leaving a fraction more than 36 per cent for the total day-growth from June 19 to July 4. The total growth of the cane, from the appearance of the bud



until the perfected bud was ready for cutting, was $12\frac{3}{4}$ inches, of which $8\frac{1}{2}$ inches was night-growth, and $4\frac{5}{8}$ inches was growth registered in the daytime. The greatest single night-growth, $1\frac{1}{4}$ inches, occurred June 20, following two cloudy days, with rainfall of 0.71 inch, and following a mean temperature on June 19 of 78.5° and a mean night temperature of 73° . The greatest single day-growth, $\frac{3}{4}$ inch, was also registered at this time, June 20 and June 21.

The Radiance chart of growth, for the same period as that of the Lady Pirrie, puts even greater emphasis on night-growth, 80 per cent of its growth in this time being made at night. In nine days out of fourteen, it made no appreciable growth in

the daytime. The Killarney Queen, on the other hand, made only 54 per cent of its total growth in the night-time. Nevertheless, every rose under observation made more growth during the night than during the day.

Incomplete as are the observations, yet the fact is apparent that the rose does not sleep at night. It knows no eight-hour law, and the hours of darkness are the moments of its greatest building activity. Is it not reasonable, then, to suppose that a drenching at this time with cold hydrant water, by lowering the soil and plant temperature, would have a retarding influence upon plant-growth? And would not retarded growth mean, other things being equal, lowered vitality, resulting in inferior growth and reduced power of resistance to disease?

The Lady Pirrie chart is interesting from another point of view. In the 1919 Annual certain charts were published which tended to show that the optimum condition of rose-bloom occurs when the temperature ranges between 60° to 85°. The Lady Pirrie chart tends to confirm this deduction by showing that the optimum condition for rose-cane growth is likewise dependent upon this range of temperature. Whenever, as on June 22 and 23, July 28, 29 and 30, the mercury drops below 60°, the growth-curve flattens out into a "no-growth" or into a retarded growth section. Likewise, when the temperature rises above 85° we find a similar flattening of the curve indicative of retardation and stoppage of growth. Furthermore, the temperature relation appears to be so dominant that its influence persists regardless of the influence of other factors such as sunshine, cloudy days, and rainfall.

The chart suggests a number of other interesting leads for speculation, but the data at present is so incomplete that it would not be wise to draw hard and fast deductions. In fact, the entire subject of this brief article is presented with some diffidence and self-distrust, and its suggestive value to other rosarians is very likely its main merit, if there be any such quality concealed within its sentences.

Roses in Railroad Economics

By EDWARD G. RIGGS

Executive Assistant, New York, New Haven and Hartford Railroad Company

EDITOR'S NOTE.—On page 86 of the 1918 Annual, mention was made of the show of Dorothy Perkins roses along a railroad cut near Philadelphia, and the detail of the work—paid for by Mr. Edward Bok, of the *Ladies' Home Journal*—was given. Later information received as to a similar display along the New Haven railroad line was followed up, with the result of obtaining the subjoined details. It is hoped that members of the American Rose Society will bring this article to the attention of other railroad authorities. It is to the courtesy of Mr. C. H. Bardo, general manager of the New York, New Haven and Hartford Railroad Company, that we are indebted for the information.

THERE is an esthetic side to the railroad business as well as a practical side. Attempts to beautify a railroad's right of way, and to make the landscape pleasant for its patrons, are evidences of this esthetic side, and the railroads of the country are beginning to give recognition to it.

In 1909 the Board of Directors of the New York, New Haven and Hartford Railroad Company, desirous of making some experiments along this line, appropriated \$5,000 for beautifying the cut through which its main line runs at Mount Vernon, N. Y. This cut extends for several miles, and in places is over a hundred feet deep. Naturally it was not particularly attractive to travelers, wherefore it was thought to be good ground for an experiment of this kind. Those in charge of the work decided to use climbing or rambler roses as the basis of the improvement.

The work of beautifying was put in charge of C. D. Perkins, then Division Engineer. The ditches along the track were concreted, the long, sloping sides of the cut were planted with Dorothy Perkins roses, and then the whole surface was strewn with grass seed. The result has been a transformation of this part of the line. For weeks this spring, travelers passing through this cut saw the slopes above their heads a mass of pink roses against a background of greensward. Each year the display grows more beautiful. Many travelers have wondered where they came from, thinking perhaps they were wild roses. On all sides have been heard favorable comment of the scene presented to them.

From time to time, when it has been necessary to do trimming, the company has made many thousands of cuttings, which

have been transplanted along the division between Mount Vernon and South Norwalk, also at frequent intervals beyond. The roses are planted on both sides of the embankment, at all suitable places where it is expected they will flourish. It would be a very difficult matter to estimate the number of rose-cuttings or cuttings from other shrubbery, as they run well into the tens of thousands. It may be stated that the roses serve two purposes: First, the beautification of the road; second, the strong roots of the bushes assist in keeping intact the sides of the cuts.

The cost of the initial setting out of the plants was approximately \$1,700, this including all expenses in connection with the necessary loam, as well as the plants, which were furnished by the J. H. Troy Nursery Company, New Rochelle, N. Y.

The company also planted some roses in the cuts east of Apponaug, R. I., on the New London Division, but these have not done very well on account of poor soil conditions.

Not content with this, they have, in the last few years, extended the rose-beds until now they are found at Stamford, Riverside, Greenwich, Port Chester, and several other places where the soil has been favorable.

Believing the members of the American Rose Society might like to know the detail of this later wholesale rose-planting, done by our own right-of-way force with plants or cuttings made under the same conditions, Mr. Perkins was asked to outline the methods used. He replied as follows:

"Our method of preparation for the planting of the rose bushes was of the simplest.

"Generally speaking, we dug a hole about two feet deep and two feet in diameter, just below the top of slope in the different cuts, filling same with top soil obtained from between top of cut and our right-of-way fences. Of course you will realize that in some cases this soil was much better than in others. Generally the subsoil in cuts will not be as favorable in most locations as on the New York Division, for there it is of a hard-pan formation and tends to hold moisture, whereas if it was sandy or gravelly, and therefore more porous, it would not hold the moisture, and pockets would have to be much larger and deeper.

"The cuttings, in most cases, were planted in a bed and allowed to root for one season, being afterward transplanted. However, we had good success in a great many instances by planting cuttings directly in these pockets."

It is evident that the appearance of this rambler rose along the company's right-of-way is much appreciated by the traveling public, as it has from time to time received complimentary letters from its patrons.

Roses in Norway

By THORALF BRYNE, Stavanger, Norway

EDITOR'S NOTE.—Cosmopolitan America, with its polyglot people, is interested in all the world. There are enough from the Norseland to make an account of roses in Norway worth while; and the following article only emphasizes the universality of the world-flower, the rose.

THE climate of Norway is often associated with ice and snow by people living in warmer regions, and certainly we do have ice-braes and snow-deserts, especially in the northern part, but it must be remembered that, owing to the extension of the coastline of Norway, there is a great variation in the climate of the different parts of "The Land of the Midnight Sun," ranging from temperate in the south and west to nearly arctic in the farthest north.

American rosarians may be interested to know that in the more temperate parts of Norway roses will not only grow but thrive and give an abundance of perfectly developed blooms. Two American ladies, on paying a visit to this locality last summer, exclaimed, when viewing the rows of roses in my nursery and the bedding roses in my garden, that they had never seen such large and beautiful roses in America. Whether their judgment would agree with that of expert rosarians in America is doubtful, but it is not the first time American visitors have told me the same thing. I think, perhaps, that the secret of the perfect development of our individual rose blooms is this—our moderately warm summers give the blooms more time to unfold their petals than where the blooming is hurried on by a hot sun.

The only winter protection we give our roses here is to hoe up the soil toward the plants before the cold gets too severe, usually in December. In sections with more severe winters, an extra cover of pine-brush or similar material may be desirable, but in many gardens here nothing whatever is done in the way of protection, and the hardier Hybrid Perpetuals will generally, in such unprotected gardens, come through unharmed by frost. In the spring, when the weather is mild enough, the cover of soil is taken off and the roses pruned. This operation generally

takes place during the month of April, or, in northern and eastern Norway, in May.

Climbing roses do well in sheltered gardens or where grown on walls. In the open, on pillars, arches, pergolas, and the like, in more exposed situations, they grow luxuriantly for several years or so at a time, being often cut down to the ground in severe winters. In order to make the culture of climbing roses more of a success here in Norway, it is necessary to select only the hardiest varieties of those now in commerce. For this purpose, I planted, last spring, a collection of about seventy-five different varieties of climbing roses, in addition to those previously grown, and hope that a number of these may prove sufficiently hardy. I cannot help thinking, though, that too little has been done by our hybridizers to give us climbers having a hardy constitution. Perhaps it is time for us northerners to take the matter in our own hands.

I have found, by years of observation, that the following climbing roses are the hardiest in our climate: Electa, Rubin, Mme. Sancy de Parabere, Ayrshire, Ruga, Ruby Queen, Graf Zeppelin, Thoresbyana. The following will do well in more sheltered positions: Dorothy Perkins, and its sport, Excelsa; Sanders' White, American Pillar, Hiawatha, Dr. W. Van Fleet, Blush and Crimson Rambler, Tausendschön. A splendid climbing Hybrid Tea is Climbing Mme. Caroline Testout. This, together, with Gloire de Dijon, Ards Rover, Reine Marie Henriette, and Mme. Alfred Carriere make an excellent quintette.

Of garden roses for bedding and cutting purposes, we grow all the older and more common Hybrid Teas and Hybrid Perpetuals, together with a sprinkling of the best of the newer varieties which have found their way to Norway. The favorite rose here is, undoubtedly, Mme. Caroline Testout. I believe this rose can hardly be beaten in all-round good qualities. Besides this, there are old acquaintances, as La France, General Jacqueminot, Fisher Holmes, Frau Karl Druschki, Gruss an Teplitz, Mrs. John Laing, Ulrich Brunner, Captain Christy, Viscountess Folkestone, among the commonest in our gardens. Several of these ought to be replaced by far newer and better varieties, but we have practically no rose literature and Nor-

wegian periodicals treating of roses. It is only through the rose catalogues of our nurseries that the newer varieties become known. The standard roses, such as Hugh Dickson, Mme. Abel Chatenay, General MacArthur, La Tosca, Pharisæer, Mme. Leon Pain, Lieutenant Chauré, Mme. Ravary, and other good sorts are found in all the better collections.

Radiance is an excellent rose for outdoor flower-cutting here; it blooms longest of all the autumn-blooming roses—sometimes, as last year (1918), up to the middle of December, keeping its color to the last and opening well in spite of cold, rainy weather and several frosty nights. Almost as satisfactory is Mme. Edouard Herriot, a splendid rose for garden decoration and for cutting. Another good bedding rose, a fine grower, hardy, floriferous, and clean, is Mrs. Wemyss Quin, the best garden yellow of all I have tried, including Rayon d'Or and Constance. As a darker yellow of excellent qualities I must mention Marie Adelaide de Luxembourg, a real beauty, well worth growing, but not entirely mildew-proof. The following sorts have also come up to their high reputation in this climate: Mme. Jules Bouché, Mrs. Edward Powell, Crimson Emblem, and Ophelia. The latter is a rose I cannot praise too much, for it blooms perfectly in our cool summers. I am intensely interested in the new Ophelia sports originated in the United States, and also the sports of Radiance.

On the other hand, rose varieties with too close petalage are here generally unsatisfactory. For this reason I do not care for Etoile de France, General-Superior Arnold Janssen, or Willowmere. The last-mentioned rose, although much praised, does not bear sufficient blooms here, and the flowers have such brittle stems that the heads fall off when shaken.

The Japanese *Rugosa* Hybrids are as hardy here as anywhere. This is also true of the *Rosa lutea* varieties, *R. centifolia*, and the Moss roses. Large, old specimen bushes of pink and white Centifolia and Persian Yellow are to be found in old gardens. They need no winter protection in this part of Norway, where we have several large specimens of such trees as *Cedrus Libani*, *C. atlantica*, and *Araucaria imbricata* about sixty to seventy years old, growing and braving the hardest winters.

Tea roses are not well adapted for culture here except Gloire

de Dijon and its hardy and vigorous race. This rose is, perhaps, almost as common in our gardens as Mme. Caroline Testout, and is the earliest of all to flower. It is usually trained on walls, but it is also grown as a bush.

I believe roses can be grown farther north in Norway than in any other country in the world. They are grown in the open ground under the polar circle and even farther north. This town, Stavanger, where I have my rose nursery and bud about twenty-five to fifty thousand roses every year, and sometimes more, is 50 degrees north of the Equator and is about the same latitude as the southern point of Greenland. Very likely it is the most northerly rose nursery in the world.

NOTE.—Apropos to the interesting article above is a note just received from Miss Carrie Harrison, of Washington, D. C.:

"On the fourth of July we were crossing middle Norway, about latitude 63°, that is three degrees north of Petrograd. At the end of the Sognefjord we came to a little village called Laerdal, and just outside our hotel window was the most magnificent bush of *Rosa lutea* (the Persian Yellow) I ever saw. It was some twelve feet high, and more than that in diameter. There were thousands of roses—more yellow roses than I ever saw before of this species.

"In Christiania, about the middle of July, the Moss roses were the most loved and were abundant."

Can We Have Plant Patents?

By J. EDWARD MOON

President American Association of Nurserymen

EDITOR'S NOTE.—Complaint is constantly made of the slowness of American nurserymen to take up good new plants for propagation and sale. Mr. Moon, himself an active nurseryman in the third generation of successful work, and the executive of the nurserymen's national organization, here makes answer upon the situation.

HOW often we hear remarks like this: "If only we had in the United States plant-breeders like those of Europe—a Lemoine, a Waterer, or a Dickson!" Then follows a sweeping condemnation of the nurserymen in a country whose state and federal agencies are spending millions of dollars to encourage horticulture and home-ground improvement.

Why are American nurserymen so slow to grow the best of the plant productions and plant introductions of federal and other introducers? Why are they so indifferent to originating new plants themselves?

Here is the reason. If you are a manufacturer, before investing capital in a new article, you look first for the probable market for the article, and then to the protection you have from infringing patents or competing brands. Would you invest much money in manufacturing an article you could not at least secure with your trade-mark? Would you put an advertising appropriation back of an unpatented, untrade-marked, unsecured manufactured article of any kind? I don't think you would!

If you were an author, wouldn't you insist on a royalty from the publishers? If a publisher, wouldn't you protect yourself with a copyright? I think you would!

If you invested your money to produce anything not agricultural, wouldn't you protect yourself, at least, with a registered trade-mark? Certainly, you would!

If, then, in order to attract and secure capital for the manufacture of an article, patents, registered brands, trade-marks, or copyrights are necessary, how much more necessary is it to secure similarly the capital one wishes to attract for the dissemination of a new plant, which may be years in process of propagation and preparation for market.

Take, for example, the splendid Hugonis rose, introduced into America through the Arnold Arboretum, and to commerce principally by the Conard & Jones Co. This company put at least two years of time and invested considerable money in building up a stock and in advertising this rose. During all the time that they were making such preparations to market it, other nurserymen could readily obtain available material with which to produce Hugonis roses, in the confident expectation that when the Conard & Jones Co. began advertising Hugonis they would sell their quietly assembled Hugonis on a market built by the Conard & Jones Co.'s advertising, and at lower prices, if they were so inclined, for they were without advertising expense.

But this is not all. Hugonis was expensively announced by the Conard & Jones Co., but other nurserymen bought quite as promptly as did the rose-lovers, and now, within three years of that rose's introduction, many nurserymen have it, the Conard & Jones Co. are no longer justified in a large expenditure to

keep it in American minds, and its dissemination is in consequence actually retarded.

How much better it would have been for plant-lovers if the laws had permitted and encouraged the sale to the Conard & Jones Co. or other successful bidder of exclusive propagation right to this rose for the ordinary patent term of seventeen years, by the Arnold Arboretum, the Department of Agriculture, or other original source! The purchaser could then, with definite protection to his investment, have afforded a liberal advertising appropriation to make it known and secure its wide distribution.

The roses would not cost the American public any more, for quantity production, and a desire to sell the rose would lead the distributor to maintain a popular price, and the publicity a nurserymen could afford to expend when given such legal protection would put a Hugonis rose, or any other similarly protected plant of merit, in every garden up and down the land where a place could possibly be found for it.

But this would not be all. The Arnold Arboretum, or other originator, would have a source of income it does not now have, and plant-breeders and introducers would have a possibility that from their experimenting and investment a comfortable living for themselves and families might be obtained.

Don't condemn the nurseryman when he seems slow to put new roses or new plants of any kind on the market. Protect their investments as industries generally are protected by patents, copyrights, royalties, etc., and the nurserymen of America will satisfy the desires of the most enthusiastic rosarians or lovers of plants of any kind with new and rare varieties, to the limit of the public's capacity for planting them.

In view of the efforts of the American Rose Society to arrange for the introduction of certain new roses produced by Dr. Van Fleet, the question raised by Mr. Moon is important. The Editor would welcome expressions.

Growing and Showing Climbing Roses

By A. J. FISH, New Bedford, Mass.

EDITOR'S NOTE.—It is by specializing that success is attained. Mr. Fish has a passion for climbing roses, and he has been most successful in taking prizes with his comprehensive exhibits of them. At the great shows of the Massachusetts Horticultural Society he has taken Silver Medals in 1916 and 1919, as well as similar honors elsewhere. Mr. Fish tells how he grows and how he shows these newer climbers. (See, also, the article beginning on page 95.)

THE growing of climbing roses for exhibition is a very pleasant hobby. To be successful, you must grow a little better flowers than the other fellow. If you then pick them right and set them up well, your hobby is justified.

Culture.—My soil is a sandy loam with a clay undersoil, on high ground with a slight slope to the east, having good natural drainage.

The roses are planted ten feet apart, in rows, and each tied to a stout stake; this is all the support they ever have. By the time the stake has rotted off, they are a tangled row, entwined together, holding themselves up on a level about five or six feet high. Grown this way, every joint will "break" with flowering shoots, and the branches will have good length stems, while those underneath will send up longer ones that are strong enough to hold up all the flowers they produce.

I do not believe in spading in stable manure when planting, but put a mulch of it on top of the ground. When the buds are forming I give them liquid manure dressing, using it weak and often rather than too strong. Bone-meal, wood-ashes and soot are also good if applied between times.

I have learned by experience that fall planting is better for climbers than spring planting. They should be planted as early in the fall as possible, leaving a considerable number of canes on the top; the roots will grow fast, and well into the winter, and there will be some bloom on the old canes the next year.

Pruning and Disbudding.—On the true ramblers that send up new growth from the roots, cut out the old wood just as soon as they are done blooming, providing they have enough new shoots for a good bush for next season. Such ramblers are never disbudded.

Do not prune the climbers that make their new growth on the plant above ground, unless they get so crowded as to kill the center of the bush.

As climbing roses seem to have vitality enough to perfect all the buds formed, producing as large flowers as when disbudded, let them all bloom so that the display will be larger. There is no gain in disbudding.

The Best Varieties.—For exhibition you can use any and all kinds that bloom early enough. My list contains about thirty-five, but the season must be exceptionally propitious to get them all in at the right date. There are some good early bloomers that are not included in my list. I am adding a few varieties every year, and hope to have a good collection in time.

Here is the list of climbing roses exhibited in 1919. My displays were awarded Silver Medals at two shows—Boston and Newport:

*Silver Moon, *Dr. W. Van Fleet, *Christine Wright, *Mary Lovett, *Bess Lovett, *Alida Lovett, *Climbing American Beauty, *Climbing Lady Ashtown, *Tausendschön, May Queen, Ruby Queen, *Baroness von Ittersum, *†Source d'Or, *Gerbe Rose, *Francois Guillot, *Carmine Pillar, *Le Mexique, *†American Pillar, Miss Helyett, Wedding Bells, Edwin Lonsdale, *Goldfinch, *Oriole, Prof. C. S. Sargent, *Electra, Sanders' White Rambler, Climbing Clotilde Soupert, Wm. C. Egan, Climbing La France, Robert Craig, Petit Louis, *Trier, Jersey Beauty, Schiller, and Dawn.

How and When to Pick, and Keeping Qualities.—Roses for exhibition should be picked early in the morning, before the sun shines on them, and with as long stems as possible. As a rule, a rose in full bloom is not suitable for showing, as it will not stand up through the exhibit. As buds are not allowable, the flowers must be just about half blown, so they will open enough by the time of judging. There is a great difference in the keeping qualities of different varieties, wherefore the exhibitor should know the peculiarities of every kind he grows. Some can be picked a day ahead of the show, if in the right condition, and put in water in a cool, dark place; others may be left on the bush until the morning of the exhibition, even if they are full blown. For instance, the flowers of Baroness von Ittersum, used at Boston and Newport, had been fully open for a

*Those starred are the best for exhibition.

†American Pillar and Source d'Or are not always early enough.

week before the show, yet they stood two days without dropping a petal.

The general belief that a double rose keeps better than a single one does not always hold, for one of the best keepers is the single American Pillar. The double yellow climber, Prof. C. S. Sargent, will stand up after it has been open several days, while Source d'Or (also a double yellow) does not keep as well, even if picked in a less advanced state than the Sargent. Wm. C. Egan should be picked early in the morning, when the buds are just opening, to stand up through the show; on the other hand, Climbing Clotilde Soupert, with its hard, globular buds, has to be forced with liquid manure beforehand to get it to open enough to exhibit. The large, single Silver Moon is a better keeper than a good many of the double varieties, and so on through the whole list. You should know them as parents do their children.

Packing and Carrying to Exhibit.—Florists' corrugated boxes are good carriers for the flowers, as they are light in weight, and, when emptied, can be knocked down and brought home flat to use again. Put some tissue paper in the bottom of the box, commence with the hardiest buds and flowers at bottom, then cover with oiled paper, then another layer of flowers and so on. Fill the box full enough to ride well without crushing when cover is on.

Put all of each variety together, so that when you open up they can be put into the receptacles with one handling. If jammed, give the flowers a little shake to straighten out the petals.

Getting Ready for the Show.—Indeed, roses look better picked and set up well than on the bushes. They also cover more table space than anyone would think before they are picked, especially if not crowded—crowding ruins your display.

When the time of the exhibition comes, fill out the entry blank and send to the secretary of the show as early as possible, so the committee can have your place all ready for you, as they are always very busy the morning of the exhibit. Do not blame the judges if you do not take the first prize; they go by the rules in the schedule the same as you have to. Probably your handling could be improved. A friend of mine spent over one

hour setting up five sprays in a vase because the stems were weak and crooked, and then it did not suit him. That vase took first prize, however.

The Art of Setting up an Exhibit, and Arranging the Color Scheme.—Some exhibitors learn to set up very quickly, while others make a long job of it. Some do not seem to ever get the knack of doing it. Some exhibits have an indefinable something about them that carries them through, while others with just as good flowers lack it, and do not win out.

Use the longest stems for the back rows, and work down to the shortest ones in front. Do not have too many sprays to a vase; three sprays seems to be about right. Do not crowd the vases.

There are more varieties in white and pink including a combination of the two colors, than of other colors. These two colors are always harmonious, and you can take care of the different reds if you have plenty of white ones to intersperse.

There are really fewer colors that clash among climbing roses than in the bush roses. The Blue Rambler is the worst, and should only be used when surrounded by white, or, what is still better, set up by itself as a novelty. Hauff, a variety intermediate in color between Blue Rambler and Crimson Rambler, should not be exhibited.

Among the reds, Baroness von Ittersum is by far the best in sight, being a clean color, semi-double, with ruffled petals—a very taking variety. Ards Rover is of good color, and an early bloomer, with poor stems generally.

After all the flowers are in water, change them around until you get a good effect. To sum up, grow as good flowers as you can, set up to the best of your ability, and take your chance. If beaten, come back again and try until you win.

ROSE NOTES

The short articles printed under this heading, beginning on page 147, are altogether worth full attention. Length is not necessarily a criterion of value in rose-lore.

The New Trailing Rose, Max Graf

By W. C. EGAN, Highland Park, Ill.

EDITOR'S NOTE.—If there is a garden or a gardener in the whole wide world more interesting than Egandale and its genius, Mr. W. C. Egan, that fact ought to be made known. But should such a marvel be uncovered, Mr. Egan and his doings would still remain unique. No one who has the good fortune to enter this lake-shore paradise of green things, maintained by love against a winter climate of polar intensity, can fail to count the visit as a memorable event. Mr. Egan has produced pictures, broad and great toward the shimmering lake, intimate and dainty in the nooks with ferns and shade-loving woods plants, and brilliant and gay against the varied greens of a host of evergreens and deciduous trees which he has conducted to their stately maturity. His observations are acute, and his determinations as frank as they are accurate. It is the Editor's sorrow that he cannot show the rose-lovers of the American Rose Society the good man himself as he stood near the superb spread of the rose he has here all too briefly described. (Mr. Bowditch has, by the way, registered this rose; see page 166.)

ONCE in a while the energies of bird and insect join forces and a stray seed is dropped in fertile soil, producing in due time a plant that is new to the world. This is called a "chance seedling." Its parentage is always a matter of conjecture. The proximity of kindred plants may help the guess, and a strong resemblance in leaf, flower, or habit of growth to either of them may help the matter still more.

Such a chance seedling is the trailing rose, Max Graf, which was discovered by the foreman, Mr. Graf, in the nursery at Pomfret Center, Conn., owned by Mr. James H. Bowditch. In the nursery were growing several species of roses, including *R. rugosa*, *R. setigera*, and *R. Wichuraiana*. Mr. Bowditch writes that the "most likely crosses are *R. Wichuraiana* and *R. setigera*, or *R. Wichuraiana* and *R. rugosa*."

My guess is that the honor belongs to the two latter. The foliage strongly resembles that of the *Wichuraiana*, at the same time having suggestions of the ruggedness of the *Rugosa* foliage, while the flower is a good pink, resembling the pink form of the true *Rugosa*. The leaves are nearly as glossy as Dawson's rose, Lady Duncan—a straight hybrid of *Rugosa* and *Wichuraiana*—but not so large, while the flower is almost identical with those of the Dawson hybrid.

Max Graf is a profuse June bloomer, some belated flowers appearing during July. But if this rose had never a flower on

it, it would take place as a most handsome ground-cover, because of its foliage of a rich dark green, unblemished by mildew, black-spot, or kindred ailments. No leaf-eating insect has yet discovered my plants, and I certainly will not advertise their presence to the bugs!

These qualities explain why Max Graf is admirably adapted for a ground-cover or for hanging over steep banks or stone



FIG. 1. Foliage of new trailing rose,
Max Graf

walls. Further, and importantly, it is reliably hardy without winter protection, even here at Egandale. It may also be used as a climber, reaching a height of ten or more feet, though, as stated, it is essentially a trailing rose. Mr. Bowditch writes that he has "a large plant about ten feet high growing on a red cedar post with side branches, making a thick, handsome bush with long shoots, that might easily be put up another five or even ten feet, apparently." In established plant-

ings, young canes emanating from the base rise up some eighteen or twenty inches for light, and then, arching over, lie prostrate upon their brethren. The growth is rapid and vigorous.

This rose does not produce seed, which means that its splendidly rich appearance is not disfigured with more or less disreputable seed-pods. Also, it has so far, unfortunately, escaped the propagating nurseryman. Perhaps this note about it will wake up some one or more of them.

PLATE XVIII, OPPOSITE

These photographs, supplied by Mr. E. K. Butler, of Jamaica Plain, Mass., show an excellent way of using a climbing rose as a prominent and attractive lawn object. The winter view sufficiently suggests the scheme, one which the Editor has found to work well with several vigorous climbers.

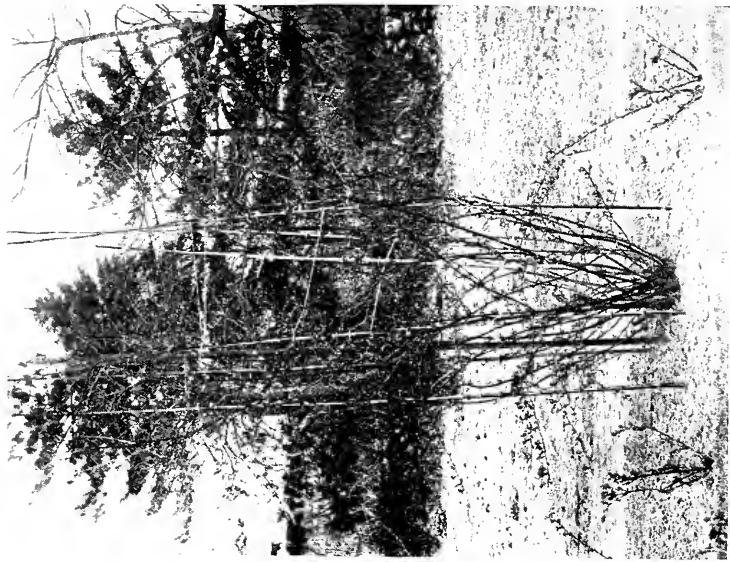


Plate XVIII. The Climbing Rose GOLDENCH, Trained as a Lawn Shrub, on Grounds of E. K. Butler,
Jamaica Plain, Mass.

The Story of the Baby Ramblers

By F. L. MULFORD

Horticulturist, Department of Agriculture, Washington, D. C.

EDITOR'S NOTE.—Visitors to the National Rose Test-Garden at Arlington (Washington, D. C.) will remember the continuous beauty of the cluster-flowered dwarf roses there in considerable quantity and in many varieties. Mr. Mulford, who has charge of the Test-Garden, tells of these satisfactory and effective roses.

THE group of roses known generally in America as "Baby Ramblers," in England as "Pompon Roses," and improperly as "Dwarf Polyanthas," is a comparatively new one whose value has not yet been generally recognized. In England they are often spoken of as "Daisy Roses," while in this country the names "Fairy Rose" and "Baby Rose" are sometimes applied.

The name "Polyantha" is not properly applicable to these roses, which are generally hybrids of *Rosa multiflora* with *R. chinensis* or with various Hybrid Perpetual varieties. The dominant parent is therefore closely akin to Crimson Rambler, itself a natural variation of *R. multiflora cathayensis*. The name *R. polyantha* is a confusing trade name, probably hitched on because Carrière first described some of these bushy hybrids as Polyantha varieties in *Revue Horticole* in 1884.

It was Robert Fortune, the English plant collector, whose years of travel in China and Japan resulted in the introduction into Europe of many worth-while plants, who, about 1865, brought home some of these Baby Ramblers from Japan. The French growers seem to have obtained from them the first satisfactory hybrids about 1884. Our yet most important American writer on the rose, the late H. B. Ellwanger, mentions, in the 1892 edition of "The Rose," that "the French rosarians appear to be getting some satisfactory results by artificial crossing with Teas and similar roses, as in the varieties 'Pâquerette,' raised by Guillot fils, and 'Anne-Marie de Montravel,' raised by Rambaux and Dubreuil." In that year he saw a promising seedling at Lyons that was later introduced as Cecile Brunner, yet one of the best.

If the value of these roses was appreciated, they would be much more widely grown than at present. They are persistent bloomers through a long period; and their dwarf habit adapts

them well for bedding or border purposes. They succeed well in the South, and also as far north as the Hybrid Teas do well. They vary considerably in height, such varieties as Orleans, Triomphe Orleanais, and *R. polyantha grandiflora* reaching a height of three feet, while many of the other varieties grow but little more than a foot high. In a climate with a rainfall of thirty-six inches distributed well through the season, they should have sufficient bloom at all times to be very attractive, and most of the season they would be a mass of color.

Most of the varieties show the dominant parentage by flowering in clusters like the Multiflora climbers, although Tip-Top and Gruss an Aachen have much larger blooms, borne singly or almost so, their habit of bloom more nearly approaching that of the Tea rose, Isabella Sprunt, than the Polyantha type. The color of the group ranges from white through pink to the crimson of Crimson Rambler. A few varieties are said to have yellow flowers, but in most seasons the yellow tint is so fleeting as not to be noted except in the opening buds.

The greatest weakness of this group is the tendency of many of the varieties to lose much of their foliage in midsummer. Like the climbing roses of Multiflora parentage, the leaves and young buds are somewhat subject to mildew, and, under unfavorable conditions, the leaves are subject to black-spot in the same manner as are many of the Hybrid Teas. These troubles, however, may be easily kept in check by the usual remedies.

Baby Ramblers should be pruned each spring by removing the old wood. It is probably best to remove all the wood except the past season's growth. The tips of the previous season's growth may be shortened back if desired. The more pruning, the more new growth from near the base of the plant. The most satisfactory results are probably obtained by not shortening in the past year's growth further than to remove any adhering hips or seed-pods.

It is difficult to suggest varieties, as so much depends on personal taste. Among the white ones, Katharina Zeimet, Schneekopf, Yvonne Rabier, Marie Pavie, and Pâquerette are all good. Marie Pavie holds its foliage among the best; Schneekopf has rather larger flowers than the others mentioned, and holds its foliage well; it is an excellent variety; Gruss an Aachen

bears its flowers singly, has splendid foliage, and its blossoms are tinged with a little yellow and pink under favorable conditions; it does not produce the mass effect of the other varieties, but is a lovely rose.

Among the varieties with more or less pink in them are Baby Tausendschön, Cecile Brunner, Pink Soupert, Mrs. W. H. Cutbush, Ellen Poulsen, Baby Dorothy, Ännchen Müller. Of these, Mrs. W. H. Cutbush and Baby Dorothy probably hold their foliage the best of any. Tip-Top is one of the handsomest of the Baby Ramblers; its blooms are rather large, the petals beautifully crimped and white, with a broad margin of clear pink. It is not as floriferous as many others, and its growth relatively weak, not attaining a height of more than about eighteen inches. The foliage is also small, which helps to give the plant an undernourished appearance.

Among the dark-flowered varieties are Mme. Jules Gouchault, Baby Rambler, Erna Teschendorff, Triomphe Orleanais, and Orleans. Of these Triomphe Orleanais is probably the most satisfactory. Its blossoms are of the clearest and brightest red, borne in abundance all through the season. The foliage is the best of this group. Orleans is also good.

Two single red roses with white eyes are Rodhätte and Baby Tom. Both are very promising.

In addition to the named varieties or hybrids of these roses, seed of the species may often be purchased. Flowering plants suitable for edging may readily be grown from this seed, the plants, under favorable conditions, blooming in ten weeks from the date of sowing.

Like other roses, the Baby Ramblers do best with clean cultivation, but otherwise they require a minimum of attention. They respond, however, to liberal feeding with continuous bloom, from the time the Tea and Hybrid Tea roses begin to bloom in the spring until freezing weather comes in the fall.

For borders or edgings in a rose-garden, or where formal lines of blooming plants are desired, the Baby Rambler roses are admirable. No rose-garden of a hundred bushes is complete without some of these varieties.

A Five-Years' Experience with Own-Roots vs. Budded Roses

By WM. P. BENTZ, Philadelphia, Pa.

EDITOR'S NOTE.—With the desire to give fullest expression to detail findings of thoughtful experiments, this article is presented. Mr. Bentz speaks for his climate and conditions. Mr. Greeley touches the subject on page 82, and another friend gives his point of view on page 156. Will others tell also their experiences?

THERE is always a difference of opinion regarding the growing of roses in different localities. A certain grower in the vicinity of New York or Philadelphia, for example, may tell us that Constance, Mme. Melanie Soupert, or Joseph Hill are weak growers and are liable to be winter-killed, although in California or in the southern states they may grow quite vigorously. A grower in South Carolina may be very successful with Teas or Hybrid Teas on their own roots, but he could not expect a purchaser in Massachusetts to have the same success. Therefore it seems to me that when we read the opinions of the different rose-lovers we must realize that they refer chiefly to a particular locality and often do not apply to other sections of the country.

My rose-growing has been on a very modest scale. I have only about two hundred plants, but each one of them has a distinct personality. Tags or labels are not necessary; I know each one and have tried to study its likes and dislikes, its weaknesses and its strong points—its “psychology,” in other words. My experience is nothing compared with the experiences of such great rosarians as Dr. Robert Huey and Capt. George C. Thomas, of my own locality, who have thousands of plants and who have made such an exhaustive and scientific study of this delightful hobby. My little experience, however, may be helpful to amateurs who do not employ professional gardeners, but who, like myself, care for their plants themselves; for them I have recorded my experience with own-root and budded roses.

I am located on the Pennsylvania Main Line, about twenty miles west of Philadelphia, on the brow of a hill overlooking the five-mile-wide Chester Valley and Valley Forge, whose bleakness is traditional, and we receive the full benefit of the biting

north winds. My natural soil is hard yellow clay; at least two-thirds of it is shale rock. To dig with a spade is impossible, and my rose-beds have had to be dug inch by inch with a pick. Therefore, I do not consider that I have an ideal spot for roses. In the matter of winter protection I have tried to be sensible and not make my plants tender by coddling them; nor do I expose them unnecessarily to the sharp winter winds.

Having read for several years much of the controversy regarding "own-root and budded roses," and possessing that typical American "I'm from Missouri" spirit, I decided to find out for myself, although I believe I learned more in favor of the "own-root" than the other class of plants. In the fall of 1914 I made four beds, exactly alike: two for "own-roots" and two for "budded plants." I ordered roses from five different growers and advocates of "own-root" plants in different parts of the country, and from six growers of "budded stock," four in the United States and two in Europe. Some of them were ordered in the fall and the rest the following spring, as I found there was also a difference of opinion as to the most favorable season for planting.

Of the "own-roots," eighteen out of thirty succumbed the first winter (1914-15), eight of them being Teas, six Hybrid Teas, and four Hybrid Perpetuals. Of twenty-six budded (on Manetti and Brier) plants I lost four—Hugo Roller, Joseph Hill, Lady Hillingdon, and Robert Huey, all being rather susceptible to extreme cold. The following spring (1915) I put in twenty-four more "own-roots," ten of them being three-year-old plants recommended by a certain firm as having special merit, and for which I paid considerably more than for two-year-old budded plants of the same varieties. Five of this planting did not even survive that summer—two Duchess of Wellingtons, two Lady Hillingdons, and one Harry Kirk—while three others of the previous fall planting were gone before the summer was over. Of the budded plants set out that spring I lost seven out of a planting of twenty-eight, but this loss was to some extent my own fault. These plants were part of an order of one dozen purchased from a very reliable firm, which sends out its roses in pots, with roots curled up into a tight ball, and, in most cases, with growth already started. It was a hot, dry day

early in May when I planted them, and I foolishly tried to separate the roots and spread them out so that they could get some food,—an impossible task,—and as a consequence seven of them sooner or later went the “way of the just.” Since that time, when obliged to buy pot-grown roses (which is just as infrequently as possible), I am careful not to disturb the roots or the earth around them, but set the whole mould in the ground and take my chances on the roots getting their nourishment. I still have about two dozen plants of this kind, but they are not doing so well as those whose roots have had freer access to the source of their existence. The majority of these are on Manetti stock, but a few, I believe, are on Canina or Brier roots. I recently dug up a plant, originally potted, which was set out in 1917 without disturbing the roots, and I found very few little shoots which had found their way outside of the original ball of earth, and the main roots were still in a tight coil.

The next fall (1915), on the advice of Capt. George C. Thomas, I ordered all my roses from a firm in the northern part of New Jersey, which buds entirely on Japanese Multiflora stock, and out of twenty-eight plants I did not lose a single one the following winter, although four of my previously planted “own-roots” had been winter-killed. The next spring (1916) I got forty more “own-root” plants, one and two year old, and put most of them in a specially constructed bed composed of the richest garden soil. I ordered only the strongest growing varieties, such as Radiance, Lady Alice Stanley, Duchess of Wellington, Mme. Jules Bouché, and Wm. R. Smith, and a few of them are still giving a fairly good account of themselves. At the same time I ordered fifteen more from Ireland, four of which refused to show a leaf. The failure of this planting I attributed to the long shipment, made especially long that year on account of the war. The next fall (1916) I added twenty-four more plants, all budded on Multiflora, from the American firm just mentioned, and only one died—Iona Herdman, a very weak grower at best.

In the spring of 1917 I gave “own roots” a final trial, purchasing about thirty of the most vigorous-growing varieties obtainable, as well as a number of climbers. I made some new beds and added twenty-six more budded plants, all on Multi-

flora, with the exception of Los Angeles, which was budded, I understand, on Ragged Robin stock, and is doing very well, although the same rose, acquired since, budded on Multiflora, seems to be a better bloomer. Realizing that it took "own roots" longer to develop than budded plants, I had decided to wait until 1917 before making any bloom comparisons, but the difference in blooming quality that season was so great that I felt real pity for my poor little "own-root" plants, many of which, instead of giving an abundance of bloom, as were their comparatively giant sisters in the adjoining beds, were just about making a struggle for existence. A very few, such as Lady Roberts, Radiance, and Mme. Jules Bouché, compared favorably in blooming quality with my budded plants, though not nearly so vigorous in growth, and the flower-stems were often weak. It is true, however, that some of the most beautiful blooms for form and color I have cut from "own-root" plants, although it has often taken the strength of the entire plant to produce those one or two perfect blooms. Here is a partial bloom record for the year 1917, all plants having had at least one previous blooming season, some of the "own roots" being three years old when planted in the spring of 1915. When two or more plants of the same kind are recorded, the number represents the average, omitting the fractions. I did not disbud, but recorded every bloom; this accounts for the large July bloom on some varieties.

1917 BLOOM-RECORD

Number of Plants Under Observation			Variety	May			June			July			Aug.	Sept.		
O.R.	M.B.	Mult.		O.R.	M.B.	Mult.	O.R.	M.B.	Mult.	O.R.	M.B.	Mult.		O.R.	M.B.	Mult.
3	2	1	General MacArthur . . .	2	4	6	3	6	7	4	5	6	No record kept for 1917	3	4	6
2	1	4	Duchess of Wellington . .	2	5	6	2	7	10	x	9	14		D	6	9
2	1	2	Jonkheer J. L. Mock . . .	x	2	3	2	4	4	x	3	5		1	3	4
4	2	1	Lady Alice Stanley . . .	3	4	4	3	5	7	4	8	9		2	4	7
2	0	2	Lady Hillingdon	3		5	2		6	3		8		3		4
2	2	1	Lady Pirrie	3	5	5	4	8	10	5	14	18		4	6	5
1	2	4	Mme. Edouard Herriot . .	4	8	10	2	6	6	x	10	14		D	3	4
3	1	2	Mme. Jules Bouché . . .	2	3	4	5	7	9	4	5	6		4	3	5
1	1	4	Ophelia	x	x	2	4	5	7	3	3	4		2	5	6
2	1	1	Radiance	3	3	5	4	6	7	7	12	15		2	3	5

Abbreviations: O.R., Own Root; M.B., Manetti or Brier; Mult., Multiflora; x, No Blooms; D, Dead.

While this list gives but few varieties, it is enough to show the relative blooming ability of the different kinds of plants. Some of those which bloomed the best on their own roots were Lady Roberts, Wm. R. Smith, and Grossherzog Friedrich, but I did not have these varieties in budded stock, and could not include them in the comparison.

In the 1918 Rose Annual is an article by Mr. A. P. Greeley, of Washington, D. C., whose roses I notice are principally on their own roots. While he is less than 150 miles farther south than I am, I should think that his climate would be more favorable to "own roots" than mine. But look at his bloom record: Duchess of Wellington for the entire season, 13 blooms; Radiance 17; Willowmere, 9; Mme. Leon Pain, 5; and Pharisäer, 5. My own "own-root" record is much the same, but almost any of my plants budded on Multiflora will give as many blooms in a single month, and good blooms, too. [See page 82.—*Editor*.]

In the fall of 1917 I purchased all of my plants from the American firm already mentioned (all budded on seedling Multiflora) and have continued to do so ever since. My losses of these plants have been so slight that I have not kept a record since 1918. Those that have winter-killed, or have died back from one cause or another, have usually been such varieties as Constance, Iona Herdman, Queen Mary, and Mme. Melanie Soupert, while out of over one hundred and fifty "own-root" plants purchased in three years I have less than three dozen at the present time. My "own-root" losses have not all been the result of winter-killing, although that has been the chief cause. Many of them, after having been in for two seasons, have looked so sickly that I have pulled them up and thrown them away. Four successive planting seasons I tried Duchess of Wellington on its own roots, planting sixteen in all, and not one of them lived over the second year; of eleven budded plants of the same variety (eight on Multiflora) I have lost only one, and that was from root-gall. The others are the most vigorous-growing plants in my garden. Of course, I believe there are varieties difficult to establish, even on budded stock. Three times I ordered Robert Huey from Ireland and lost every one. In the fall of 1918 I bought some American-grown plants on Multiflora and they are doing very well. I also have had

difficulty in establishing Mme. Melanie Soupert, Iona Herdman, and Constance, even on Multiflora.

I would not say that "own roots" are more susceptible to disease than budded plants, but it does seem to me that when disease attacks them they are less able to withstand its ravages and give up the fight more easily. Suckering seems to be a point much spoken of as a drawback to budded plants. I have frequently found Manetti and Brier suckers, sometimes to a dangerous degree, especially on Holland-grown plants, a few of which I still have; but on over one hundred and fifty American field-grown plants on Multiflora Japonica, some of which I have had for four years, I have yet to find my first sucker. These comparisons refer only to outdoor culture of Teas and Hybrid Teas. When it comes to climbers, especially those of Wichuraiana blood, I believe that "own roots" are decidedly the better, for I cannot see how their vigor can be improved by putting them on another stock. I have about twenty different varieties of climbers, and almost all of them are on their own roots. For greenhouse culture I believe that the professional florists prefer own-root plants, but of course growing roses under glass is a different art altogether.

I realize that certain rootstocks flourish better in one kind of soil than another, and this may also be true of "own roots." My soil probably is not suited for them, but I have traveled around my section of the country—in fact, have gone right to the establishments of the "own-root" growers—in the hope that I might see a model "own-root" garden which could compare with such gardens as those of Dr. Robert Huey, Capt. George C. Thomas, Dreer's Test-Garden, or the beautiful formal garden of Bobbink & Atkins, and have been sadly disappointed.

My conclusion, therefore, at least so far as this locality is concerned, is that Teas and Hybrid Teas on their own roots are not generally a success, and that budded plants with their roots curled and cramped in pots are little better. My preference is most decidedly in favor of field-grown American stock, budded on seedling Japanese Multiflora (until a better stock is discovered), and planted in the fall.

A New Pest of Roses in Greenhouses

EDITOR'S PREFACE

Two statements follow, both of an authoritative nature, concerning a new bug-bother for growers of roses under glass. The bother for the greenhouse men is new, but the bug itself is an old outdoor offender which has seemingly just discovered that roses indoors taste better, both root and leaf, than strawberry roots and leaves outdoors. As there is no certainty that *Paria canella* may not discover a liking for outdoor roses, it is well for our garden friends to be on the alert. It is an obvious suggestion that the use of soil from strawberry beds be avoided in preparing outdoor rose-beds.

The Editor calls especial attention to the offer of aid by Mr. Weigel, and to Dr. Sanders' expressions of regret that so many growers fail to avail themselves of state and Federal agencies of aid, maintained by taxation, and anxious to be of service. Every member of the American Rose Society is urged to use such resources freely in the public interest.

Thanks are due to Dr. Sanders, through whose courtesy are presented the accurate drawings showing this mean little beetle and his beginning as well as his dirty work. The drawings are based on photographs by Mr. Weigel, and on specimens in the office of the Pennsylvania Bureau of Plant Industry.

A Serious Menace to Greenhouse Roses

By C. A. WEIGEL, Collaborator

Bureau of Entomology, United States Department of Agriculture,
Washington, D. C.

DURING the past summer simultaneous reports were received by the Office of Greenhouse Insect Investigations, Bureau of Entomology, concerning two widely separated occurrences of an insect injuring roses in greenhouses. The specimens which accompanied these reports were found to be the adult of the strawberry root-worm or leaf-beetle, *Paria canella* Fab. This native pest has been long recognized as a serious enemy of strawberries and raspberries, and occasionally of the apple, crab-apple, juniper, and several other plants. It has, however, hitherto not been authentically reported as injurious to roses grown in greenhouses.

Since these preliminary reports were received a careful survey has been inaugurated in order to establish its exact status under greenhouse conditions. As a result, we have recently secured positive evidence that this insect is now of prime importance to many of the commercial rose-growers of the United States. At present it is causing much anxiety in several of the largest rose-

growing establishments, and in some cases has practically ruined their entire stock. While one or two florists report that they have had experience with this pest for several years, the authentic records indicate that it has been exceptionally injurious during the last two seasons only. As a result of this information the Bureau of Entomology has immediately taken up the matter with all of the State Entomologists, soliciting their coöperation by furnishing any data relative to its status. This article is written, at the request of the Editor of the American Rose Annual, primarily for the purpose of bringing this matter to the timely attention of the rose interests of the country.

It is most remarkable that a pest long known to both the wild and cultivated strawberries should suddenly change its feeding habit by adapting itself to a new host, as the rose plant, which is grown under entirely different conditions.

Nature of the Injury.—The damage to rose foliage is caused mainly by the full-grown beetle, and does not differ materially from the injury done to the strawberry. The entire foliage is badly perforated and ragged, presenting a shot-hole appearance (Fig. 2) as a result of their voracious feeding. These more or less rounded holes, which vary in size and shape, are so close together that the plants look as though loads of shot had been fired into the foliage at short range. The beetles show a marked preference for the new and young shoots, which they badly scar by their peculiar manner of feeding, giving them a very unsightly appearance. Ultimately, the entire growth is badly stunted from the gradual killing of the affected parts, thereby reducing their commercial value.



FIG. 2. Rose foliage infested with strawberry root-worm.

Description.—The full-grown, adult beetle (Fig. 3) is about one-eighth inch long, and oval in shape. It is quite variable in color, so that several colored varieties are known, ranging from wholly black to yellowish brown, but ordinarily it has four spots on the wing covers. The common variety is brown in general color, with black markings. The entire insect is highly polished,

and the wing-covers are ornamented with longitudinal rows of minute pits.

The larva (Fig. 3) or grub is about the same size, and when full grown it resembles a white grub, the same as is found under sod, except in size. They are found close to the surface of the ground, feeding on the roots of the rose plants.

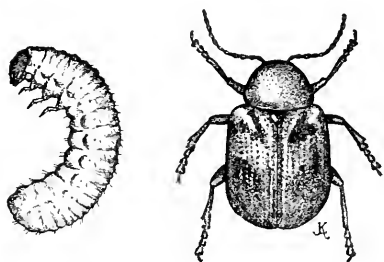


FIG. 3. On left, larva or grub, and on right, mature beetle of the strawberry root-worm (*Paria canella* Fab.). The figures are much enlarged; the beetle is about one-eighth inch in length. The grub feeds on the roots of roses in greenhouses, and the beetle on their leaves.

When the larva is full grown, transformation takes place within a smooth-walled cell which is constructed in the soil for that purpose. Finally, it emerges as the full-grown beetle, the female of which lays the eggs for the future generation. As far as is now known, the adults hibernate under mulch or other convenient

shelter during the winter months. It has been noticed by the florists who have reported damage that the beetles put in their first appearance about the latter part of May, or early in June, and reach their maximum numbers during July. Their feeding may continue throughout the month of August or even later. There may be several broods annually under glass.

The beetles are rarely seen, and have never been observed feeding during the brighter hours of the day. Occasionally they may be collected in dead or dried and curled-up leaves, or under debris among the surface soil. Beginning at dusk and extending to the early morning hours, they may readily be observed feeding on the plants. On being disturbed they play "possum."

Control Recommendations.—In the preliminary control experiments conducted by the writer, with the assistance of E. L. Chambers, of the Federal Bureau of Entomology, it was found that the arsenicals or stomach poisons, which are ordinarily employed to control leaf-eating insects of this type, were quite ineffective.

The best results thus far obtained were by the use of hydrocyanic-acid gas against the adult beetles. Until further prog-

ress has been made in the life-history studies and habits of this new rose-pest in greenhouses, it is recommended to fumigate *at night only* with the above gas, using two ounces of sodium cyanide for every thousand cubic feet of space which is to be fumigated, and giving exposure of two hours. The destruction of the adults at this time should forestall a recurrence the following spring and summer, since a very large percentage of the females are killed many months prior to the normal time of egg-laying. Incidentally, as the insects occur in their maximum numbers during June and July, the above treatments fit in conveniently in normal cultural methods.

Growers are also advised not to bring sod or soil into their houses in which strawberries or raspberries, either wild or cultivated, have been growing, because the larva or grub stage occurs in the soil, and such soil is very likely to be the source of an infestation in the greenhouses.

The Bureau of Entomology is now actively engaged in a thorough study of the life-history, habits, and the best means of controlling this new rose-pest. It is therefore requested that all specimens of a suspicious nature, or which may conform with the above description, be immediately mailed to the writer for examination, addressed as at the head of this article.

Strawberry Root-Worm Injuring Greenhouse Roses

By J. G. SANDERS

Director Pennsylvania Bureau of Plant Industry, Harrisburg, Pa.

Certain Pennsylvania rose-growers have suffered heavy losses of greenhouse roses caused by the attacks of the so-called strawberry root-worm, which has transferred its attentions from native outdoor plants to tender roots and foliage of roses growing under glass.

In the Philadelphia district especially severe losses have occurred during the past three to four years, and various mechanical means for capturing and killing the beetles have been employed, but with poor results, and at considerable expense for hand-labor.

The wonder is that these growers are content to use antiquated insect-control methods, and to suffer continued losses, rather than to ask of their state or Government agricultural officials advice and aid in control methods, which are often well known to the expert, and quite satisfactory when properly applied. The entomologists are interested at all times in reports of serious damage by pests, and they will generally do all they can to control the marauders.

This new rose-pest must be studied carefully from every standpoint of its various life-stages, and the most vulnerable stage determined in order to plan control methods. The writer believes that the grub or larval stage, which destroys the roots, and perhaps the pupal stage, will be found more available for control under modern cultural methods than other stages. Soil fumigation, or drenching with tobacco water, or this in combination with some soluble chemical, may be found most advisable. Only by carrying out careful and extensive tests will the best remedy be found.

Fumigation of the houses at night with cyanide to kill the adult beetles is advisable only when the house construction is very good, and where overhead space is limited. Fumigation with tobacco gives no results. Soil treatment with tobacco water, or with cyanide, or other solutions, may prove effective in killing the underground stages, and tests will be made.

One grower seems to think that the beetles become more abundant in those houses where the roses are permitted to dry out during the resting period, but careful observations will be needed to verify this statement.

The Pennsylvania Bureau of Plant Industry has made arrangements for coöperative investigations of this rose root-worm with the United States Bureau of Entomology. Investigations are now under way in the Philadelphia district, and every effort will be made to circumvent the new pest. Mr. C. A. Weigel's article describes and discusses the several stages of the pest and its principal damage to the plants. The writer similarly proffers his services in consideration of any suspected insects and will be glad to be advised of experiences with damage or control.

The Rose Midge

By ROBERT MATHESON

Assistant Professor of Economic Entomology, Cornell University

EDITOR'S NOTE.—A recent extensive and complete bulletin of the United States Department of Agriculture (Bulletin No. 778), on the treatment of the rose midge, one of the mean little bugs that bother roses in greenhouses, has been condensed and summarized for us by Professor Matheson, to the end that its conclusions may be easily available to members of the American Rose Society. It should be noted that while this pest primarily attacks roses under glass, it has the same possibility and probably the same disposition as the strawberry root-worm to do business outdoors. Information concerning it, therefore, is worth while to the outdoor amateur as well as to the grower of roses indoors.

THE rose midge (*Dasyneura rhodophaga*) is a small fly closely related to and resembling the Hessian fly, a serious pest of wheat. This insect has become widely distributed throughout the country and is a serious pest in the production of roses under glass. It also attacks roses grown in the open. In a recent publication (Bulletin 778, United States Department of Agriculture) there appears a summarized account of this pest and the brief outline presented herewith is largely drawn from this source.

Life History.—The fly is a small midge measuring about one-twenty-fifth inch in length. It is brownish in general color, and may be seen in rose-houses at almost any season of the year. However, it is most abundant in the spring and early summer months. The female deposits her small yellowish eggs just under the sepals of the flower-buds or between the folded leaves of the leaf-buds.

The eggs hatch in about two days. The young maggots feed on the buds, sucking out the sap, thereby causing the buds to dry up and die. The maggots mature in about a week. The full-grown larvæ are about one-twelfth of an inch in length and are reddish in color. They leave the buds and, entering the ground, construct small silken cocoons in which they pupate. The adults emerge in about five to seven days and within a very short time begin depositing eggs for a new brood. The entire length of the life cycle is from two to three weeks, so that there are many broods each year. The usual seasons of severe outbreaks are from May to July and September to December.

Food-plants.—This midge is restricted apparently to the rose plant. Among roses it seems to prefer the Hybrid Teas. The following varieties have been recorded as seriously injured by this pest: Radiance, Hadley, Mrs. Charles Russell, Killarney, Ophelia, Hoosier Beauty, Mrs. George Shawyer, Milady, American Beauty, Uncle John, Joseph Hill, Miss Kate Moulton, Bridesmaid, Liberty, Richmond, Mrs. John Laing, Meteor, Mme. Abel Chatenay, Ivory, Golden Gate, Souvenir of Wootton, La France, and a sport of the latter, the Duchess of Albany.

Control.—Under greenhouse conditions this pest can be controlled by the following methods, if practised with any degree of care. When the midge is abundant, the ground in the rose-houses should be covered with a one-fourth to one-half-inch layer of tobacco dust and the houses given nightly fumigation with nicotine papers or volatile nicotine preparations. These can be easily obtained from dealers in insecticides and full directions for their use will be found on the packages. If the infestation is severe, the nightly fumigation should be continued for about two weeks or until no flies are found. Then the houses should be fumigated every other night for another ten days. By such methods all the flies should be killed before they can deposit eggs. After the houses have been rid of the pest, care should be exercised so that no infested plants are again introduced. One infested plant will serve as a center and in a very short time the whole cleaning-up process will have to be gone over again.

More About Mildew and Other Fungous Troubles

Reported by THE EDITOR

THE greater the prevalence of rose-growing, the greater the interest in growing them to success, and, consequently, in combating or preventing the recurrence of mildew and other fungous troubles. In previous issues of the American Rose Annual, the history and control suggestions, so far as these have been determined for all fungous diseases, have been presented.

Unfortunately, the scientific study of these pathological conditions, instituted several years ago by the American Rose Society, was discontinued for want of funds, and it still remains a fact that despite the considerable number of plant pathologists employed by the various state governments and the Federal Government, no one of them has had opportunity to work to a complete finish the control possibilities for fungous diseases.

During 1919, V. M. Johnson, of North Vancouver, British Columbia, propounded certain queries in regard to mildew which the Editor referred to Dr. L. M. Massey, who has done such excellent work in rose pathology. These questions and their answers illuminate the situation in respect to mildew sufficiently to here present.

The questions are given under number, with the answers just below each:

1. Is mildew prevalent on roses all over the world? If not, in what climates is it most troublesome?

Ans.: Mildew occurs wherever roses are grown.

2. Do roses in light soils suffer more than those in heavy soils?

Ans.: Experimental data are not at hand to definitely answer this question, but it is my opinion that the lightness of the soil, within the limits conducive to normal growth, has no effect upon the prevalence and severity of mildew.

3. Is drought at root an established reason for mildew? If so, why do some varieties get the disease while others in the same bed are untouched?

Ans.: Mildew is caused by a fungus. Nothing is known concerning drought at root being a contributing factor—it is not “an established reason for mildew.” Difference in susceptibility, and the fact that some plants escape the disease, may account for some varieties not having the disease even though growing in a bed with diseased plants.

4. Does overhead watering induce mildew, or, on the contrary, does the continual washing of the leaves tend to clean off the spores?

Ans.: Moist conditions, as brought about by overhead watering, are favorable for mildew. Continuous washing of the leaves might remove some spores from them, but it is very probable that a sufficient number would be lodged among the hairs on the leaf to initiate infection, after which the disease would flourish. No experimental data are at hand.

5. Does suppressed mildew conduce to black-spot?

Ans.: Mildew and black-spot are caused by two distinct organisms (fungi). One does not conduce to the other.

6. I would like to see a really reliable list of mildew-proof roses.

Ans.: I know of no mildew-proof roses, as established by reliable experiments.

7. Are cold nights or cold winds responsible?

Ans.: Cold nights and cold winds may be contributing factors, but the real cause, as you know, is a fungus. Winds and drafts carry the spores, and it is possible that a chilled plant is more susceptible, although there is no experimental work to substantiate this supposition.

Ramblers and other climbers which are generally held to be very susceptible to mildew will be found to suffer less severely from the disease when grown away from walls so that they have free air-exposure. This is explained on the basis of moisture relations, the air drying the plants quickly. Fungus spores, like seeds of higher plants, require moisture to germinate, and it is characteristic of most fungi that they flourish under moist conditions.

Are you acquainted with results obtained in the control of mildew and black-spot through the use of sulfur-lead dust? These results were published in the 1918 Annual of the American Rose Society.

Getting New Roses from Abroad

By THE EDITOR

IN the Annual of 1919 there was printed an article "Where Are Our Roses Coming From?" in which the whole situation as to available rose plants in America was discussed, figures being presented to show the importations to the end of June, 1918. There was also printed a letter from the Chairman of the Federal Horticultural Board, Dr. C. L. Marlatt, making a statement as to the probable method under which interested amateurs could obtain new roses from abroad.

Much has happened since the publication of Dr. Marlatt's letter last year. Federal Quarantine No. 37 was in force after June 1, 1919. This quarantine order prohibits the importation of all "finished" rose plants from abroad, save under special permit and for special purposes. It permits the importation of stocks for rose propagation.

The Editor has believed, and yet believes, that a very important part of American rose-growing is the importation and testing, under varied conditions and by many persons, of the roses originated abroad. Barely 5 per cent of the garden roses of to-

day are of American origin, and while, as the successive issues of this Annual will witness, there is a very important stimulation of American origination proceeding, it is yet a fact that the great foreign rosarians are producing, and will continue to produce, new roses which it is most important for the United States to avail of.

Particularly is this situation made the more critical and difficult in the presence of the fact that European growers are now presenting new varieties, many of which had been produced during the war, but which could not be described or disseminated in the troublous years of the great fight. The review elsewhere given, which it is believed is quite complete, shows the available foreign roses and gives the best available descriptions of them. Many seem well worth trial in America. (See page 113.)

Much correspondence has been had with the Federal Horticultural Board, with the aim of securing some modification which would make it relatively easy for interested American amateurs to obtain such foreign roses for testing as were deemed desirable. The situation as it stands at the issuance of this Annual is apparent in the following statement furnished by the Pathologist in Charge of Foreign Plant Quarantines, which may be accepted as authoritative:

HOW TO IMPORT NEW OR UNAVAILABLE ROSES

An amateur who wishes to import, under Quarantine 37, Regulation 14, small lots of new varieties of roses or of varieties not available in the United States should proceed as follows:

(1) Secure from the Federal Horticultural Board, Washington, D. C., a copy of the regulations and their explanatory circulars and an application blank for a special permit.

(2) Fill out the application blank, giving all the information required therein, designating specifically the varieties desired, and forward it to the Federal Horticultural Board.

(3) After receiving the permit, execute the bond which is sent with it and return it promptly to the Federal Horticultural Board.

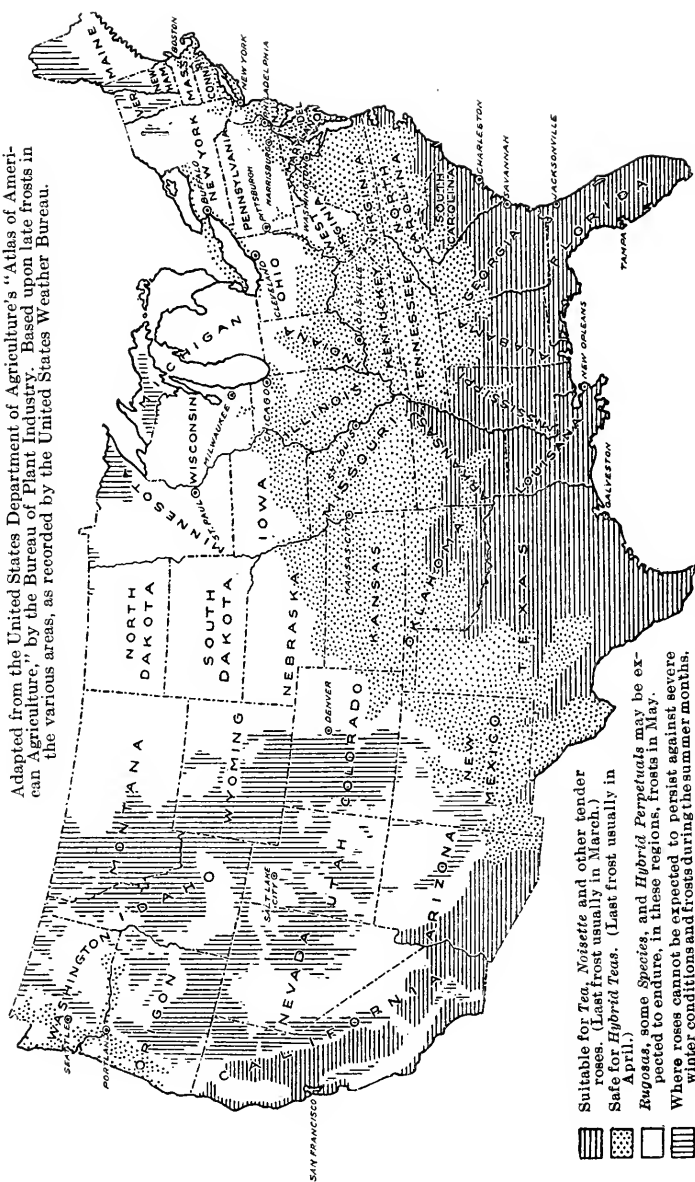
(4) After executing the bond send the foreign shipper the permit number with the order for the roses and include with the shipping instructions the addressed tag furnished by the Board which states that the roses are to be shipped for inspection to the Office of Foreign Seed and Plant Introduction, Bureau of Plant Industry, Washington, D. C.

R. KENT BEATTIE,
Pathologist in Charge, Foreign Plant Quarantines.

February 5, 1920.

ROSE-ZONE MAP

Adapted from the United States Department of Agriculture's "Atlas of American Agriculture," by the Bureau of Plant Industry. Based upon late frosts in the various areas, as recorded by the United States Weather Bureau.



Suitable for *Tea*, *Noisette* and other tender roses. (Last frost usually in March.)
 Safe for *Hybrid Teas*. (Last frost usually in April.)
Rugosa, some *Species*, and *Hybrid Perpetuals* may be expected to endure, in these regions, frosts in May.
 Where roses cannot be expected to persist against severe winter conditions and frosts during the summer months.

The New Rose-Zone Map, as Prepared by the Department of Agriculture. (See page 160.)

What American Rose Society Members Want

By THE EDITOR

COMPLIMENTARY references to the various preceding issues of the American Rose Annual have not been wanting, nor indeed have constructive references and suggestions. In order that, if possible, the mind of the Society might be studied, there was inserted in the 1919 Annual a post card on which members were asked to express themselves in answer to the following questions:

"What do you like most about the 1919 Annual? What about it do you like least? Is anything in it helpful to you? What would you like to see in the 1920 Annual? Any other suggestions?"

The answers were considerable in number, and covered not only the United States but some foreign countries. They show a lively, acute, and important interest in rose-growing.

To the first question, "What do you like most about the 1919 Annual?" the replies were literally astonishing to the Editor, in one respect and not in another. Dr. Van Fleet's fascinatingly interesting production on rose hybridization was generally approved, as might have been expected; but that the relatively dull tabular information with respect to the success of roses in various gardens and test-gardens should be heartily approved was the unexpected item, by which the Editor is duly admonished.

But few responses were made to the question, "What about it do you like least?" "No fault in it;" "It's all good;" "All interesting;" "Its brevity;" "It should be five times as long;" "Personalities;" "Should need a microscope to find it;" "The Index;" "The finish;" "The apparent approval of excluding foreign roses;" "Absence of practical advice for southern rose-growers;" "The long wait for it;" "Not enough illustrations;" "The roses I can't have;" "Sentimental opinions;" "No such animal;" "That rose canker investigation was not continued;" "Lack of experimental results with tests on control of mildew and black-spot;" "That it is not published every month."

The answers to the question, "Is anything in it helpful to you?" were all affirmative, and covered, in the majority, references to the bloom records and similar detailed information, one facetious rose brother even writing, "Couldn't keep house without it!"

As to "What would you like to see in the 1920 Annual?" the return was even more complete. A demand was made for more information about rose diseases, and the Editor has been doing his best to get it, but with minor success. A request was made to provide for "the adoption of some kind of a color chart or standard of description of roses because the descriptions in catalogues are confusing and misleading." An article in this issue shows progress that may be encouraging. Amateur and city rose-gardens are of much interest to some people, and pictures are wanted, which cost limitations prevent producing.

A definite want is for more and yet more lists of roses to do well in small gardens in various sections. Very much is the Editor moved by this request, and very much effort has he put forth for this information. The plan that will be proposed to members will undoubtedly result in getting it in some shape for presentation in the 1921 book.

Among other answers to this question is the asking of another question: "How to care for roses from pot-life before planting to a permanent place, and whether own-root or grafted plants are better?" This Annual presents some suggestions in both directions.

"A vote to find most satisfactory roses for East, Middle West, and Pacific Coast, with habit of growth in each district," is an acute inquiry, as is one for "A complete, classified, alphabetical table of all the roses, with parentage, origination, date of introduction, color, disease propensities, etc." Work has been going on for two years on an attempt in this latter direction, and the impatient Editor now has hopes, which incidentally can be realized with more promptness if the membership and when the cash resources of the Society are materially increased.

Subjoined are other pertinent queries, all of which are taken to heart by the Editor, and on many of which much effort has been made:

I would like to know about raising roses from seed.

Something by Captain Thomas on his new roses.

A complete analysis of rose species.

A list of wild roses, both native and foreign, grown in the United States.

How to keep over Hybrid Tea roses where the thermometer sometimes goes to 25 degrees below zero.

Explain why lime and cow-manure should be mixed.

A list of thirty roses every grower should have.

Something about rose-growing in California.

Give us more colored plates.

More research by Professor Massey to find remedies for other things.

More information as to the roses that do not succeed, and a discussion on the bad as well as the good points of roses.

An article on new American roses; color description of the leaders.

More about actual methods in protection of roses where the climate is severe.

Advice for the amateur in the Far South.

Methods for combating pests.

An illustrated article on pruning.

A description of "special beds" as referred to by Captain Thomas, and comments by competent observers on the proper handling of Pernetianas.

An article on old roses.

Information for novices as to bed-building and selection of varieties, protection, etc.

Something that will help to get rid of ground-moles in the rose-garden.

There are several inquiries as to advertisements of the rare and new roses discussed in the Annual. The Editor wishes the tradesmen were more nearly up to the procession, but they are coming! One facetious sister asks for "the name of some insecticide that would put an end to all enemies with one good dose." Anyone would become a great benefactor if he could adequately answer this query.

An enthusiastic member proposes a rose-button for the Society. Why not have one?

No member has proposed the much-needed additional support for the American Rose Society which would be available if the yearly fee joined the upward flight of all costs! Dues of, say, \$3 per annum would permit the expansion of the Annual, as well as the publication of other much-needed helps to members, including the catalogue asked for.

It will be observed that many of the things which characterize this Annual have been asked for. The Editor wishes he could answer every query in person and fulfil all requests. Being human he can only do his best, ask for patient tolerance, and urge that further suggestions, commendations, and kicks come his way.

Roses in the 1920 Gardening Magazines

AN EDITORIAL INQUIRY

MANY enthusiasts desire the publication of a rose magazine, but not enough, it is probable, to make such a magazine commercially self-supporting. Indeed, it is the belief of the Editor and of some of his friends that it is far better for the prosperity of the rose in America to have it receive the attention which is its queenly due from all the garden and horticultural press, than to have the limited propaganda effort of one more or less effective special publication.

Some effort has been made, consequently, to interest the outdoor magazines, and those national newspapers known to conduct a weekly garden section. A letter was written to each editor, asking him to state briefly what his periodical would do for roses in 1920. The response was decidedly interesting, for certain editors were shy of any such expression for trade reasons, and others had apparently not yet discovered the rose as a subject worth special consideration. Educational work undertaken upon several of these gardenless editors of garden magazines was reasonably effective, however!

The result is here submitted for the guidance of members of the American Rose Society. The small type statement at the head of each item is our own, and purely for information.

HOUSE & GARDEN is published monthly at 19 West 44th Street, New York City, at 35 cents per copy and \$3 per year.

"*House & Garden* is thoroughly in sympathy with efforts to increase the already great popularity of roses for the home grounds. At present writing we have definitely arranged for an article by J. Horace McFarland on the use of roses as shrubs, to appear in the May issue, and several other short articles, on general care, etc., for publication through the coming season. Just what material on climbing roses we will publish during 1920 is undecided, but we shall undoubtedly give space to these forms of the family. In their climbing type roses have an architectural value, which renders them peculiarly deserving of *House & Garden's* consideration."—RICHARDSON WRIGHT, Editor.

THE GARDEN MAGAZINE is published monthly at Garden City, N. Y., at 25 cents per copy and \$3 per year.

"As occasion demands, according to season and circumstances, the *Garden Magazine* discusses roses and rose-gardens, particularly with a view to their enjoyment rather than for commercial interest. The April issue will present a comprehensive review of American roses and American rose hybridizers, with many illustrations."—LEONARD BARRON, Editor.

COUNTRY LIFE is published monthly at Garden City, N. Y., at 50 cents per copy and \$5 per year.

"*Country Life*, during the summer months, plans to show several of the most beautiful rose-gardens that can be found. With its long season of bloom, from June to early frost, there are multitudes of subjects to select from. Of course, such gardens as Mrs. Hugh Auchincloss', at Newport, are too well known for us to reproduce, but we will endeavor to ferret out some new and not so well known gardens."—REGINALD T. TOWNSEND, Managing Editor.

THE COUNTRY GENTLEMAN is published weekly at Philadelphia, Pa., at 5 cents per copy and \$2 per year.

"*The Country Gentleman*, during 1920, will contain many articles and suggestions on home planting and home beautifying. In these articles the rose is recognized as an essential to any beautifying scheme of permanent value and really artistic merit.

"Throughout the year we will seek to keep pace with the rapidly advancing developments of American roses for America. We can promise our readers among other articles on roses an important and notable discussion of the newer climbing roses by J. Horace McFarland, editor of the American Rose Annual. Mr. McFarland's article will be elaborately illustrated. *The Country Gentleman* believes that every American home should have more and better hardy roses."—BARTON W. CURRIE, Editor.

HORTICULTURE is published weekly at 78 Devonshire Street, Boston, Mass., at 5 cents per copy and \$1 per year.

"While *Horticulture* devotes particular attention to roses of commercial varieties, it also gives considerable space to those which are of value to the private gardener. It plans to print accurate reports about all the new and worth-while roses, as well as considering whatever new developments may appear in the field of rose-growing. In short, *Horticulture* aims to publish whatever will be of value and interest to commercial growers and expert gardeners."—E. I. FARRINGTON, Editor.

GARDENERS' CHRONICLE is published monthly at 286 Fifth Avenue, New York City, at 25 cents per copy and \$2 per year.

"During the year 1920 we shall endeavor to instill a lively interest in the rose and to help create a place for it in every garden. We shall treat on its culture, its charm as a garden flower, and its practical uses in the home. We shall report on the merits of the novelties that have been recently introduced, as outdoor plants. Special articles on the subject of the rose contributed by well-known rosarians will be published, covering in detail such information as will be of most practical value to those who grow the rose for the pleasure they derive from it."—M. C. EBEL, Editor.

GRIT is published weekly at Williamsport, Pa., at 5 cents per copy, and \$2 per year.

"*Grit* gives attention to beautifying the home within the expenditure limits of families of average means. Among articles by experts, on flowers and shrubs in the course of a year, will be found several on roses dealing with hardy varieties, their culture and care. These articles are invariably illustrated."—FREDERIC E. MANSON, Managing Editor.

The Editor will be glad to know of other periodicals which give more than incidental attention to the rose, so that the list may be extended.

Three Years of Back-Yard Bloom-Record

By A. P. GREELEY, Washington, D. C.

EDITOR'S NOTE.—The referendum among members of the American Rose Society, elsewhere referred to definitely, determined the acceptability of close and accurate trials of varieties. Mr. Greeley has, therefore, in bringing up-to-date his careful observations on the roses under his own eye in Washington, provided data of much value for that climatic radius. We hope for similar observations in other climates. Readers should also consult Mr. Bentz's article on page 60.

THE roses in my back yard, reported on in the 1918 and 1919 Annuals, showed improvement in growth and blooming for the season of 1919 over previous seasons, the total number of blooms from Hybrid Tea and Tea roses (including four Polyanthas and two Hybrid Perpetuals) being 2,859, as compared with 2,362 in 1918, and 1,927 in 1917. They gave me a good handful of blooms practically every morning from the middle of May to the last of October, and a few blooms after the first of November. The seventy-eight roses on the record which follows, showing ten or more blooms for the season, are, in my opinion, good roses for this climate and for the naturally poor soil and other adverse conditions which my small back yard affords. Many of the roses which gave less than ten blooms for the season, as well as some of those not here recorded which gave less than five, are also good roses, and will show much better results next year. All of the seventy-eight are from good to very good in color and form of bloom, and, except the Polyanthas and a very few of the others, are from medium to large in size of bloom.

I have tried out the roses which I had in 1917, most of which were on their own roots (under not very favorable conditions, it is true), and have given the roses acquired since 1917, both own-root and grafted, a shorter trial, but enough to satisfy me as to many of them. I have found the following varieties satisfactory on their own roots—some of them very satisfactory—showing good growth and a fair number of blooms after the second season, with indications of considerable increase from year to year:

G. Nabonnand, Ecarlate, Eugenie Lamesch (Poly.), Mme. Eugene Marlitt (Bour.), Antoine Rivoire, Lucullus (Bengal), Winter Gem, Gruss an Teplitz, Gloire Lyonnaise (H.P.), Mme. Jules Bouché, Radiance, Harry Kirk, Mrs. Herbert Stevens, Frau Karl Druschki (H.P.), Mrs. B. R. Cant, Joseph Hill, Marie Van Houtte, La Tosca, White Maman Cochet, Mrs. A. R. Waddell, President W. H. Taft, Mary, Countess of Ilchester, My Maryland, Hoosier Beauty, Tip-Top (Poly.), Mrs. Hugh Dickson, Gorgeous, Mrs. George Shawyer, G. Amedee Hammond, Lady Plymouth, Mrs. Aaron Ward, Mrs. Charles E. Pearson, Etoile Poitevine, Lyon Rose, Baron Palm, Queens Scarlet, Irish Fireflame, Paul Neyron (H.P.).

The following have not done well enough to warrant further trial on their own roots:

Admiral Ward, Alexander Hill Gray, Blumenschmidt, British Queen, Chrissie MacKellar, Colleen, Dean Hole, Edith Part, Etoile de Lyon, Farbenkönigin, Florence Pemberton, Francis Scott Key, George C. Waud, Golden Emblem, Helen Good, Iona Herdman, Kaiserin Auguste Victoria, Killarney Brilliant, Lady Ashtown, Lady Dunleath, Lady Mary Ward, Lady Roberts, La France, Mrs. Sam Ross, Mrs. T. Hillas, Primerose, Prince E. C. d'Arenberg, Souvenir du President Carnot, Sunburst.

Nearly all of these have been discarded or have died and have not been replaced. A few have been replaced by plants grafted on Multiflora.

Other roses which have not been satisfactory on their own roots, but are retained for the present, are:

Cardinal, Charles Dingee (W. R. Smith), Comte G. de Rochemur, Duchess of Wellington, Edward Mawley, Florence Forrester, George Dickson, Grossherzog Friedrich, Hadley, Hugo Roller, Jonkheer J. L. Mock, Lady Greenall, Mme. Caroline Testout, Miss Alice de Rothschild, Mme. Jules Grolez, Mme. Leon Pain, Mme. Melanie Soupert, Mrs. Forde, Mrs. Frank Bray, Mrs. Wakefield Christie-Miller, Principal A. H. Pirie, Rhea Reid, Robin Hood, White La France.

I have put in duplicates on Multiflora of many of these.

From my own records and observations I am satisfied that for first-season results roses grafted on Multiflora are better than those on their own roots, and that the roses on Multiflora show improved results the second season and some improvement the third season. Own-root roses show small results in growth and blooming the first season, much better results the second season, and a considerable improvement in the third season over the second.

Of the roses of which I have complete records for the first, second, and third seasons after planting, the following comparison of number of blooms fairly indicates what may be expected:

OWN-ROOT ROSES: First season, average of 42, six blooms (0 to 20); second season, average of 52, fourteen (2 to 87); third season, average of 42, nineteen (2 to 165).

GRAFTED OR BUDDED ROSES: First season, average of 45, twenty-three (0 to 183); second season, average of 23, twenty-seven (1 to 117); third season, average of 6, thirty (5 to 119).

Fifteen roses on own roots gave me, for the fourth season after planting, an average of 28 blooms, and seven old roses on own roots, planted in 1909 or 1910, gave me an average of 91 blooms each for each of the three years 1917, 1918, and 1919.

I have had comparatively little trouble the past season from either mildew or black-spot, though I did not use either spray or powder. I did, however, try to keep leaves showing black-spot well picked off. I do not like to have blooms show either spray or powder, and I do not want bordeaux mixture or sulphur and arsenic on the lettuce which I grow among the rose bushes! I find that Black-Leaf 40 (nicotine sulphate), in solution about double the strength directed on the bottle, applied with a so-called camel's-hair brush (two for a nickel), directly to the colonies of aphides on the young shoots disposes of them effectively and neatly, and is equally effective for the black aphides on chrysanthemums, as well as for slugs and other crawling pests—even for full-grown caterpillars.

ROSES GIVING OVER FIFTY BLOOMS

(O.R. signifies own-root plants; G. refers to those grafted or budded.)

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1910	G. Nabonnand. Coppery yellow	O.R.	1917	May 21	22	112	138	103	27	80	482
			1918	May 16	26	13	32	26	22	18	144
			1919	May 8	24	27	34	40	41	25	193
1917	Ecarlate. Scarlet	O.R.	1917	June 29		1	8	6	1	1	17
			1918	May 15	8	17	16	21	11	14	87
			1919	May 20	27	26	34	34	18	26	165
1917	Lady Ursula. Flesh-pink .	G.	1917	June 9		7	7	7			24
			1918	May 16	10	18	25	19	9	18	99
			1919	May 27	5	40	34	20	16	4	119
1918	George Elger, Poly. Yellow .	G.	1918	May 18	41	32	39	35	20	18	183
			1919	May 16	25	28	38	17	7	2	117
1916	Eugenie Lamesch, Poly. Yel- low	O.R.	1917	May 29	3	9	21	8	4	5	50
			1918	May 17	11	13	22	26	15	14	101
1909	Mme. Eugene Marlitt, Bour. Carmine-red	O.R.	1917	May 29	25	75	12	58	15	12	197
			1919	May 25	17	35	17	11	18	16	114
			191	May 18	133	30	2	15	9	11	200
			191	May 20	23	58	12	5	6	9	113

ROSES GIVING OVER FIFTY BLOOMS, continued

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1918	Leonie Lamesch, Poly.	G.	1918	May 14	19	17	33	28	20	14	131
	Coppery red		1919	May 20	16	16	16	14	16	9	86
1916	Antoine Rivoire. Rosy flesh.	O.R.	1917	May 23	1	5	15	8	7	3	39
			1918	May 18	3	15	8	11	3	10	50
			1919	May 22	10	28	11	16	7	8	80
1909	Lucullus, Bengal. Crimson..	O.R.	1917	May 18	52	12	11	21	21	3	120
			1918	May 10	49	3	14	5			71
			1919	May 5	26	14	7	10	4	5	66
1909	Winter Gem. Pink	O.R.	1917	May 29	1	6			2	1	11
			1918	May 20	3	11	20	33	4	3	47
			1919	May 17	14	19	7	10	9	6	65
1918	General-Superior Arnold	G.	1918	May 21	4	8	9	7	2	5	35
	Janssen. Carmine		1919	May 24	12	19	7	7	5	2	52

ROSES GIVING TWENTY-FIVE OR MORE AND LESS
THAN FIFTY BLOOMS

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1916	Gruss an Teplitz. Crimson- scarlet	O.R.	1917	May 23	5	4	10	1			20
			1918	June 6		7	17	3	1	1	30
			1919	May 20	7	8	19	7			41
1916	*Ophelia. No. 1. Salmon-	O.R.	1917	May 24	1	4	1	1			7
1918	*pink	O.R.	1918	July 27			2				2
1919		G.	1919	May 27	4	32	1	1	1	1	40
1919	Ophelia. No. 2	G.	1919	May 31	1	27	5	3	1	2	39
1917	Lady Pirrie. Coppery red- dish salmon.	G.	1917	July 7			7	1	1	1	10
			1918	May 20	1	7	9	4	1	5	27
			1919	June 7		20	5	7	2	2	36
1918	Mme. Edmee Metz. Rosy carmine	G.	1918	May 20	9	14	22	6	3	7	61
			1919	May 23	9	4	9	4	6	2	34
1918	Mme. Maurice de Luze. Rosy pink	G.	1918	May 26	4	10	8	4	2		28
			1919	May 26	11	5	10	4	3		33
1916	*Pharisæer. Rosy white . .	O.R.	1917	June 6		2	1	2			5
1919		G.	1919	May 30	3	5	8	9	6	2	33
1910	Gloire Lyonnaise, H.P. . .	O.R.	1917	May 25	17	11	9	13	2		52
	Lemon-yellow		1918	May 16	4	2	9	1	7	2	26
			1919	May 14	4	5	6	5	8	5	33
1918	Mme. Jules Bouché. White.	O.R.	1918	June 30		1	3	3	5		12
			1919	June 9		13	9	3	6	1	32
1916	Radiance No. 1. Pink . . .	O.R.	1917	June 6		4	10	2		1	17
			1918	May 7		3	1	4	2	3	14
			1919	May 14	4	16	6	2	1	3	32
1917	George C. Waud. Orange- *vermillion	O.R.	1917	June 16		1			1		2
		G.	1918	May 25	2	2	5				9
			1919	May 24	3	8	8			2	30
1916	Harry Kirk. Sulphur-yellow	O.R.	1917	May 31	1	6		1	4		12
			1918	May 20	2	4	6		3	2	17
			1919	May 27	3	17	6	2	1		29
1917	Mrs. Herbert Stevens White	O.R.	1917	July 16			1	4			5
			1918	May 27	4	4	11	9	1	1	30
			1919	May 31	1	13	5	1	5	3	28

NOTE.—Some of the plants starred (*) on the above list winterkilled and others, I think, died from too generous a supply of ground bone.

ROSES GIVING TWENTY-FIVE OR MORE AND LESS THAN FIFTY BLOOMS, con.

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1919	Killarney Queen. Pink . . .	G.	1919	May 29	3	10	4	7	1	3	28
1916	Frau Karl Druschki. H.P.	O.R.	1917	June 1		21	2				23
	White		1918	May 21	2	2					4
			1919	May 28	2	25					27
1917	Mrs. B. R. Cant. Carmine .	O.R.	1917	June 29		1		1	2		4
			1918	May 16	3	2	7	3	2	1	18
			1919	May 26	1	10	5	2	5	4	27
1916	Radiance No. 2. Pink . . .	O.R.	1917	June 18		1	5			1	7
			1918	May 20	2	3	3	3	2	2	15
			1919	May 22	4	13	4	3		3	27
1918	White Maman Cochet No. 2	G.	1918	June 1		2	3			1	6
	White		1919	May 25	4	6	6		7	2	25
1917	Joseph Hill. Salmon-pink .	O.R.	1917	Oct. 19						1	1
			1918	May 22	2	2	4	3	3	2	16
			1919	May 26	2	14	2	1	4	2	25

ROSES GIVING FIFTEEN OR MORE AND LESS
THAN TWENTY-FIVE BLOOMS

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1917	Marie Van Houtte. Pale yellow	O.R.	1917	June 16		2	1			2	0
			1918	May 15	5	8	5	4	1	1	24
1916	La Tosca. Silvery pink . .	O.R.	1917	June 28		1	4	6	4	1	16
			1918	May 21	1	8	3	1			13
			1919	May 25	5	2	5	5	6	1	24
1910	White Maman Cochet No. 1	O.R.	1917	June 3		7	4		1	1	13
	White		1918	May 25	5	5	4		1	3	18
			1919	May 22	2	10	3	1	6	1	23
1917	*Farbenkönigin. Rosy car- mine	O.R.	1917	July 27			1				1
1919		G.	1919	June 2		9	3	9	1	1	23
1917	Mrs. A. R. Waddell. Rosy salmon	O.R.	1917	Sept. 14					1		1
			1918	June 8		2	3	1	3		9
			1919	May 21	1	4	4	3	2	9	23
1918	President W. H. Taft. Salmon-pink	O.R.	1918	June 4		4	11		1	4	20
			1919	May 22	5	3	6	4	1	3	22
1919	Gustav Grünerwald. Car- mine-pink	G.	1919	June 10		11	7		3		21
1916	*Lady Ashtown. Carmine- pink	O.R.	1917	May 27	2		1				3
			1918	July 30			1	2			3
1919		G.	1919	May 31	1	11	5	2	1		20
1917	Mary, Countess of Ilchester. Carmine	O.R.	1917	Sept. 18					1		5
			1918	May 27	1		2	1			3
			1919	May 30	4	2	9		4	1	20
1918	My Maryland. Salmon-pink	O.R.	1918	June 24		1	2		1	1	5
			1919	May 29	2	5	8	1	1	3	20
1918	Mme. Edmond Sablayrolles. Yellow	G.	1918	May 31	1	5	7	2	2		17
			1919	May 27	1	6	7	3	1	1	19
1919	Margaret Dickson Hamill. Maize-straw	G.	1919	June 5		11	5	2			18
1917	Hoosier Beauty No. 1. Crimson-scarlet	O.R.	1917	Aug. 2				1	2	1	4
			1918	May 13	2	9	5	3	1	5	25
			1919	May 22	2	9	2	1	3		17

ROSES GIVING FIFTEEN OR MORE AND LESS THAN TWENTY-FIVE
BLOOMS, continued

Year Planted	NAME			First Bloom	No. of blooms per plant							Total
					May	June	July	Aug.	Sept.	Oct., Nov.		
1917	Tip-Top, Poly. Yellow- carmine	O.R.	1917	June 16		1	4	4	1	1	11	
			1918	May 22	7	1	13	2	1	1	25	
			1919	May 29	4	8		3	1	1	17	
1917	Mrs. Hugh Dickson. Cream	O.R.	1917	July 22			1	1	1		3	
			1918	May 26	1		3		1		5	
			1919	May 19	1	2	6	5	2		16	
1917	Gorgeous. Orange-yellow. .	O.R.	1917	July 24			2	1	4		7	
			1918	May 13	1	2	1	1		1	6	
			1919	May 17	6	7	1	1			15	
1919	Mrs. Franklin Dennison. White	G.	1919	June 2		12	2		1		15	
1918	Mrs. George Shawyer. Rose	O.R.	1918	Nov. 19						1	1	
			1919	May 17	1	5	3	3	2	1	15	
1917	G. Amedee Hammond Apricot-yellow	O.R.	1917	Aug. 5				2		1	3	
			1918	June 3		6	4	4	1	3	18	
			1919	June 3		9		2	3	1	15	
1917	Lady Plymouth. Ivory- cream	O.R.	1917	July 31			1	1	2		4	
			1918	June 7		2	2			1	5	
			1919	May 26	2	3	3	2	3	2	15	

ROSES GIVING TEN OR MORE AND
LESS THAN FIFTEEN BLOOMS

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1918	Mme. Colette Martinet. Golden yellow	G.	1918	May 21	1	9	6	3			19
			1919	June 4		11	2	1			14
1919	Mme. Marcel Delanney. Pink	G.	1919	June 12		6	6	1	1		14
1916	Mrs. Aaron Ward. Yellow	O.R.	1917	June 10		2	3	3	2	2	12
			1918	June 5		2	4	3			9
			1919	June 1		4	8		2		14
1917	Mrs. Charles E. Pearson. Orange	O.R.	1917	June 8		2	1	2	1		6
			1918	May 13	2	3	3	1	2		11
			1919	June 6		4	6	1	3		14
1917	Etoile Poitevine. Red- streaked	O.R.	1917	Aug. 22				1		1	2
			1918	May 16	2	2	2		1		7
			1919	May 23	3	5	1	2	2	1	14
1917	*Chateau de Clos Vougeot. Scarlet	G.	1917	June 2		2	5				7
1919	*Lyon Rose. Coral-red-yel- low	G.	1919	May 30	1	10		1	1	1	14
1917		O.R.	1917	July 7			2			2	4
			1918	May 23	1	3	1	1	2		8
			1919	June 5		7	4	1	1		13
1918	National Emblem. Crimson	G.	1918	May 17	1	5	3	3			12
			1919	May 26	2	5	5		1		13
1917	Baron Palm. Red	O.R.	1918	Aug. 6				2		1	3
			1919	May 14	3	4	2	1	2		12
1918	Tipperary. Yellow	G.	1918	May 24	6	3	2	1	2		14
			1919	May 27	2	1	5	2		2	12
1918	*Mrs. F. W. Vanderbilt. Orange-red	G.	1918	May 19	2	10	2	3	1		18
1919	*Blumenschmidt. Citron- yellow	G.	1919	June 9		7	2	1	1	1	12
1917		O.R.	1917	Aug. 29				1			1
1919		G.	1919	May 30	2	4	3	1	1	1	12
1918	Etoile de France. Crimson	G.	1918	May 25	5	6	3		1		15
			1919	May 30	1	6	2	1		2	12

ROSES GIVING TEN OR MORE AND LESS THAN FIFTEEN BLOOMS, continued

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1917	Autumn Tints. Coppery red-orange	G.	1917	June 14		1	9	2	4	1	17
			1918	May 13	1	6	2				9
			1919	June 6		3	1	6	1		11
1917	*Königin Carola. Satiny rose	G.	1917	June 3		6		3	1		10
1918		G.	1918	June 20		6	2	2	1		11
			1919	June 7		6	3	2			11
1918	Panama. Pink	O.R.	1918	June 10		4	1	2	4	1	12
			1919	May 23	3	1	3	3	1		11
1919	*Viscountess Enfield. Coppery old-rose	G.	1919	May 31	3	5	2	1			11
1916	*Willowmere. Pink	O.R.	1917	May 28	1	3	5				9
1919		G.	1919	June 2		9	1			1	11
1917	*Iona Herdman. Yellow . .	O.R.	1917	Sept. 16					1		1
1919		G.	1919	June 3		7	4				11
1918	Irish Fireflame. Orange-crimson	O.R.	1918	Aug. 9				3	3		6
			1919	May 15	2	2	5	1		1	11
1919	Reine Marguerite d'Italie. Vermilion	G.	1919	June 6		4	2	1	3	1	11
1910	Paul Neyron, H.P. Pink . .	O.R.	1917	June 1		15				1	16
			1918	May 22							9
			1919	May 28	9						10
			1919	May 28	2	8					10
1917	Col. R. S. Williamson. Pink	O.R.	1917	July 31			1	1			2
			1918	June 11		2	4		1	1	8
			1919	June 8		5	3	1		1	10
1917	*Louise Catherine Breslau.	G.	1917	June 24		6	1	4			11
1918	* Coral-red-yellow	G.	1918	June 26		3					3
1919		G.	1919	May 31	1	7	1		1		10
1917	Marquise de Querhoent. Yellow and rose	O.R.	1917	June 30		1	4	6	5	4	20
			1918	June 5		5	1	1	2		9
			1919	May 23	2	2	2	1	3		10
1916	Mme. Edouard Herriot. Coral-red-yellow	O.R.	1917	June 20		1	1				2
			1918	June 5		5	3	1	1	4	14
			1919	June 7		7	1	2			10
1917	*Queen Mary. Yellow	G.	1917	June 8		1	5		1		7
1919		O.R.	1919	May 29	3	3	1	1	2		10
1917	Mme. Caroline Testout. Satiny rose	O.R.	1917	June 23		3	7	3	1		14
			1918	May 21	2	3	4				9
			1919	May 25	1	7	1			1	10

ROSES GIVING FIVE TO TEN BLOOMS

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1916	Gen. MacArthur. Scarlet . .	O.R.	1917	July 3			2	1			3
			1918	July 17			1	1			2
			1919	June 6		5	1	1	2		9
1917	Mme. Charles Lutaud. Chrome-yellow	O.R.	1917	Aug. 15				2			2
			1918	June 15		2					2
			1919	May 31	3	2	3	1			9
1919	Papa Gontier. Red	O.R.	1919	May 12	4	3	1	1			9
1916	Mme. Leon Pain. Salmon . .	O.R.	1917	June 10		2	2	1			5
			1918	June 12		1	2	1			4
			1919	May 21	2	2	2	2		1	9
1918	Lady Alice Stanley No. 2. Coral-rose	G.	1918	June 5		5	7	2	10	1	25
			1919	June 2		3	2	1	2		8
1918	Duchess of Sutherland. Pink.	G.	1918	June 2							0
			1919	May 23	6	2					8
1919	Olivia. Red	O.R.	1919	June 14		3		5			8

ROSES GIVING FIVE TO TEN BLOOMS, continued

Year Planted	NAME			First Bloom	No. of blooms per plant						Total
					May	June	July	Aug.	Sept.	Oct., Nov.	
1919	Recuerdo de A. Peluffo.	O.R.	1919	June 15		3	1	3	1		8
1918	Hoosier Beauty No. 2.	G.	1918	Aug. 2				1			4
	Crimson-scarlet		1919	June 1		2	2	3		1	8
1916	Mrs. Frank Bray. Coppery	O.R.	1917	June 14		6	2	1		1	10
	ecru		1918	June 7		5	1	4			10
			1919	June 6		2	4		2		8
1918	Mildred Grant. White.	O.R.	1918								0
			1919	May 31	1	3		1		3	8
1917	Comte G. de Rochemur.	O.R.	1917	July 23			3	3		2	8
	Rosy scarlet		1918	May 31	1	2	2	4			9
			1919	June 1		5	1	1			7
1917	Hugo Roller. Lemon-yellow.	O.R.	1917	July 31			1	1			1
			1918	June 3		1	3	3	1	1	9
			1919	June 6		5	1	1			7
1919	Marquise de Sinety. Yellow	G.	1919	May 30	2	3	2				7
1917	*Mrs. Ambrose Riccardo.	G.	1917	May 27	2	2	4	2	1		11
1919	*Yellow	G.	1919	June 2		5	2				7
1919	*Mrs. George Gordon. Rosy										
	pink	G.	1919	June 13		3	2	2			7
1917	White Killarney. White	O.R.	1917	May 27	1	4	1	4			10
			1918	May 22	2		2	2		1	7
			1919	May 27	3	1		1	2	1	7
1916	Edward Mawley. Crimson	O.R.	1917	June 19		3	1	1			5
			1918	May 24	1	2	2	1			6
			1919	May 22	1	5				1	7
1917	Friedrichsruh No. 2. Deep	G.	1917	July 15			3				3
	red		1918	May 22	3		4				7
			1919	May 27	4	1			1	1	7
1916	Frances C. Seton. Rose-pink.	O.R.	1917	June 7		4	10	3	3		20
			1918	May 27	1	2	4	1		3	11
			1919	May 31	1	3		1	1		6
1917	Molly Sharman-Crawford.	O.R.	1917								0
	White		1918	May 25	4						4
			1919	May 29	5	1					6
1918	Principal A. H. Pirie.	O.R.	1918	Aug. 9				2			2
	Silvery pink		1919	May 29	1	2		3			6
1917	Rhea Reid. Scarlet-carmine	O.R.	1917	June 27		1					1
			1918	July 21			3		1		4
			1919	May 31	1	1	2	2			6
1916	Charles Dingee. Soft pink	O.R.	1917	June 19		8	4	6	1	3	22
			1918	June 18		1		1			2
			1919	July 14			1	3	1	1	6
1918	Earl of Warwick. Salmon-	G.	1918	June 28		1	2	2	1		6
	pink		1919	May 29	1	1	2	2	1		5
1917	Friedrichsruh No. 1. Deep	G.	1917	July 5			4	3	1		8
	red		1918	May 14	6	8	4	1			19
			1919	May 20	1	1	1	2			5
1916	*Hadley. Crimson	O.R.	1917	June 10		1	1				2
1918		O.R.	1918	May 20	1	1	1		1	1	4
			1919	May 31	1		1	2			4
1916	Miss Alice de Rothschild.	O.R.	1917	June 3		2	3	1	1		7
	Yellow		1918	June 3		2	4		2		8
			1919	June 5		2	2	1			5
1919	Mrs. Glen Kidston. Rosy	O.R.	1919	June 10		3	1		1		5
	carmine										
1918	Mrs. S. T. Wright. Cad-	G.	1918	May 28	2	2	3	2	1		10
	mium-old-gold		1919	May 27	3			2			5
1919	Gloire des Belges. Carmine	O.R.	1919	June 8		3		1		1	5
1917	Lady Alice Stanley. Coral-	G.	1917	June 27		1	1	1		1	4
	rose		1918	July 7			1				1
			1919	June 7		1	3			1	5
1918	Grossherzog Friedrich. Car-	O.R.	1918	Aug. 9				1	2	1	4
	mine-rose-pink		1919	May 28	1	3		1			5

The Ideals of the World's Rose Originators

A Symposium Gathered by the Editor

WITH the keen interest in new varieties manifested by the acute amateurs who make up the larger body of membership in the American Rose Society, it has seemed worth while to endeavor to discover the aims of the men who have been producing the roses we buy. Inquiry was made of all known producers of new roses in England and Ireland, of whom five responded. In America the inquiry was made of nine known producers, of whom three responded directly, and one, whose productions are most important, indirectly. As another of the American growers is not now at work on new roses, and the ideals of two others are well known, it may be noted that the return covers most of the American hybridizing field.

The first question was:

What in your opinion is the one ideal plant form for a rose (the rose plant you would prefer if you could have but one): dwarf bush, tree form, tall bush, climber?

Messrs. Alexander Dickson & Sons (Ireland), Philip le Cornu (Island of Jersey), and Alexander W. Montgomery, Jr. (Hadley, Mass.), all answer "dwarf bush."

R. J. E. Green, Manager of Hobbies, Ltd. (Dereham), says: "It would be invidious for us to name one rose only; we are so enthusiastic that we literally love most of the beautiful roses recently created."

Rev. J. H. Pemberton (Romford, England) prefers "A tall bush requiring no pruning, only slight thinning out of the old wood to admit light and air; but where space is restricted I prefer a dwarf bush."

Walter Easlea (Essex, England) prefers tall bush.

The second question was:

In this one rose what would be your preference in flower form, in flower habit (as to whether the bloom should be borne singly, several together, or in clusters), in color and in fragrance?

The answers may best be set forth separately:

Alexander Dickson & Sons: "The ideal rose should have good form, pure color, and fragrant blooms, borne singly."

R. J. E. Green: "Our ideal rose must combine a clean and decided self-color with fragrance, and all forms are welcome to us."

Rev. J. H. Pemberton: "In this one rose, form of flower should be deep petaled, globular, or semi-single, with prominent, erect, golden stamens. Flowers should be produced several on one stem, in corymbs. The color should be crimson, with orange shading; the fragrance, a blend of damask and musk perfume."

Walter Easlea: "Long, shapely, high center, full and carried erect, in clusters of three to five; brilliant scarlet, or rich, blood red, with fragrance of Mme. Abel Chatenay."

Alexander W. Montgomery, Jr. (Hadley, Mass., originator of Mrs. Charles Russell): "Clear, pure non-fading color, constant in all changes of weather; large, long, pointed bud, with a mature flower; large, perfectly imbricated, high center, of 50 petals, opening completely and freely in all seasons, these petals large, long, and of heavy texture; fragrance, all possible."

E. G. Hill (Richmond, Ind.): "A flower with a stiff stem, with 36 to 40 petals; fragrant; not in clusters; any good self-color."

The third question was:

For your ideal rose would you prefer continuous bloom, crops of bloom, or the one great burst of so-called June bloom?

Alexander Dickson & Sons: "Crops of bloom."

R. J. E. Green: "Certainly continuity of flower is a desirable attribute."

Philip le Cornu: "Continuous bloom."

Walter Easlea: "Continuous."

Rev. J. H. Pemberton: "Constantly in bloom from June to December."

Alexander Montgomery, Jr.: "Continuous."

E. G. Hill: "A variety that will produce fine flowers in June, then a good quantity of flowers from the middle of August until frost."

The fourth question was:

What is the best character and appearance of rose foliage, in your opinion?

Alexander Dickson & Sons: "Smooth, glossy foliage."

R. J. E. Green: "Foliage after the manner of that produced by American Pillar, and the harmony of the foliage of many kinds of Chinas, Teas, and Hybrid Teas, with the flowers produced by the several kinds equally pleasing."

Philip le Cornu: "Dark green, very smooth, so as to be mildew-resisting."

Walter Easlea: "In the style of Golden Emblem, Cissie Easlea, Louise Catherine Breslau; also the beet-root colored foliage of Lady Hillingdon."

Rev. J. H. Pemberton: "The foliage should be tough and shining, as if varnished, in order to resist mildew."

Alexander Montgomery, Jr.: "This will vary with the type."

E. G. Hill: "A medium-sized leaf, with good texture."

The fifth question was:

Referring now to prevailing classes of roses, please state which class—Tea, Hybrid Tea, Perpetual, Hybrid Perpetual, Dwarf Polyantha, shrub roses, climbers, single roses—has most engaged your attention as a rose-breeder.

Dickson, Green, Montgomery and Hill all answer "Hybrid Tea varieties." Philip le Cornu says: "Hybrid Teas and Per-netianas. Would especially like to raise a cross having the form and color of Juliet, with the habit of growth and freedom of flowering of Queen Mary." Pemberton has been working for "a race of perpetual flowering cluster roses, good in autumn, suitable as shrubs and pillars, because there is lack of these in the rose world."

The next question was:

If you have worked particularly with the so-called forcing roses to be grown under glass for flowers out of season, please state what one existing variety is in your mind most nearly ideal, regardless of who originated it.

Alexander Dickson & Sons: "A very difficult question to answer. Much depends on climatic conditions. In America, Killarney; in Great Britain, Richmond."

R. J. E. Green: "Mme. Abel Chatenay is still prominent in our opinion as a forcing rose. Increased hardiness and greater disease-resisting, with more perpetual flowering habits, will undoubtedly be obtained."

Walter Easlea: "Ophelia."

Alexander W. Montgomery, Jr.: "Killarney, from the grower's standpoint."

E. G. Hill: "Ophelia for breeding purposes. Have made a specialty of varieties for forcing under glass."

The next question read:

Have you reason to believe that increased hardiness, better plant forms, greater disease resistance may be obtained, or that recurrence of bloom, greater variety and perfection of color can be introduced into outdoor roses for the temperate zone through the use in breeding of any rose species not now generally used?

Alexander Dickson & Sons: "We cannot see what species could be used which has not been already tried."

Walter Easlea: "I believe *Rosa canina* is capable of great results by cross-breeding; also *R. lucens*, *R. Jackii*, *R. Soulieana*."

Rev. J. H. Pemberton: "There are doubtless possibilities in the attainment of all these by breeding from rose species not generally used."

Alexander W. Montgomery, Jr.: "Yes."

E. G. Hill: "It stands to reason that the introduction of the blood of new species with present types of roses will ultimately give us a type of rose suitable for our middle tier of states."

The last question was:

If you have not previously stated your ideals for garden roses, both dwarf and standard, for hardy climbers and for greenhouse roses, please do so briefly.

Walter Easlea: "For dwarf, a General MacArthur of improved form of flower, more elongated and brighter; for standard, roses similar to Mme. Caroline Testout in good rich crimsons and yellows; in climbers, we want American Pillar and Lady Gay with golden yellow flowers, a Paul's Scarlet Climber with

fragrant flowers and perpetual; ramblers of a true perpetual flowering character are much required, but must be real ramblers, and hardy. For the greenhouse, a fuller and more elongated Lady Hillingdon, and a Catherine Mermet of the color of Hoosier Beauty."

Alexander W. Montgomery, Jr.: "If I were working on outdoor roses I would confine myself to the production of tall bush varieties, using the Rugosa hybrids as a base."

E. G. Hill: "There should and will be produced garden varieties by the persistent efforts of the specialists who are seeking the commingling of the blood of the natural species roses with the Tea and Hybrid Tea classes."

One English hybridist, Walter Easlea, has in a separate note so succinctly stated the ideals he is working for that they are here separately set forth:

I am working toward the following ideals:

We need immunity from fungoid pests, such as black-spot and mildew.

I want to improve on existing popular kinds; for instance, to obtain a Mme. Caroline Testout with fragrance and with rich crimson or golden yellow color; a Frau Karl Druschki of more compact growth, and fragrant; a Hugh Dickson less vigorous in growth; a Hadley minus its tendency to blue; a General MacArthur with expanded flowers of elongated form and more brilliant color; a Mrs. Charles Russell in shades of salmon, pink, yellow, scarlet, white, and flame.

I would like to have Marechal Niel blooms on a Mme. Caroline Testout plant, and as free-flowering. (Mme. Caristie Martel approaches it slightly, but the rose must be good in all weathers.)

We need good crimson Hybrid Teas, with the size and fullness of such Hybrid Perpetuals as Alfred Colomb and Mrs. John Laing. The blooms of all must be carried erect, and be powerfully fragrant. I prefer the elongated form of Mrs. George Sawyer and Mrs. A. E. Coxhead, and as full.

We need Polyantha roses with clusters like Orleans, but of Lady Hillingdon color.

Other correspondents, who have not answered all the questions, are working quite intelligently. For example, the veteran John Cook seeks a rose of heavy petalage and high fragrance, with pink tints, and the best form for the greenhouse grower. Fred Howard, the producer of Los Angeles, is interested most with the improvement of the yellow, bronze and orange tones of the Pernetiana strain, and is trying to get good foliage and persistence into that class. A. J. Clarke, of Portland, Ore., has a cross "between Ophelia and Hoosier Beauty" which is, he thinks, of much promise for indoor use. F. R. M. Undritz, who has raised several roses (registered by the American Rose Society) possessing exceedingly good foliage, a rather low climbing habit and very double flowers, is working toward the hardy everblooming climber, and his rose Silver Star, registered with the American Rose Society, a cross between Silver Moon and

Marie Van Houtte, unites Wichuraiana and Cherokee blood with the Tea strain, which ought, if hardy, to give a most attractive result.

Alexander B. Scott, long known as a most acute rose-grower, and the distributor in America of the Dickson roses, is working first to produce roses that are profitable for cut-flower purposes, and second for gardening roses. He has Cornelia, of much promise, and Red Janet, of at least equal promise. In a recent letter he writes:

"There is a fascination about hybridization of roses, and also a lot of disappointment. I reached my ideal last year in a crimson-scarlet. When I saw it, the thought came to my mind of the remark that George Dickson made to me several times when inspecting new roses, to the purport that I was the most severe critic who ever entered their grounds. I looked at that new rose of mine last year and considered it my ideal of a perfect scarlet-crimson rose. I propagated four plants from it, and now this year the blamed thing won't grow, so all we can use it for is to keep the blood and try to get the same thing in one that grows stronger."

Dr. W. Van Fleet's ideals are made quite plain in his recurring notes on rose hybridization, as printed in the successive *Annals*. The admiration felt abroad and at home for American Pillar, Silver Moon, and his other splendid climbers, will always give him a high place in the rose world, regardless of present efforts. Incidentally, attention is called to Plates III, VI and VII showing yet unnamed hybrids of his origination. Captain Thomas, in his article in this *Annual*, makes plain not only his ideals but his definite approximation toward them, as illustrated, and his painstaking work is continuing upon a large scale of endeavor. M. H. Walsh has implanted his ideals in the climbers of the whole world through Lady Gay, Excelsa, Evangeline, and similar roses. Hoopes, Bro. & Thomas Co. brought into the American rose world a new ideal in large-flowered climbers through Climbing American Beauty, Christine Wright, and Purity.

This symposium is presented as indicating, though not very completely, the efforts of the most progressive and active rose producers. That others may come to help and to improve on these ideals, and that also these workers may succeed in developing forms suited to the various climatic ranges of our broad land, so that no part of America may fail to have roses galore, is certainly the hope of the Editor.

Potted Roses in Season and Out of Season

Compiled by THE EDITOR

THOSE who have visited any of the great national flower shows held in the United States in the last ten years have exclaimed with delight at the beauty of the roses in pots, notably the climbers. For some reason, no one seems to have discussed the methods used to prepare these roses for blooming out of season, or, indeed, to have considered the importance of what one might call a portable rose show.

True, several of the great rose-selling firms, including A. N. Pierson, Inc., and Henry A. Dreer, make a point of selling roses in pots, but there is no attempt to prepare these roses so sold for the sort of use to which they might be put as seen in the shows.

Correspondence with Thomas Roland, a noted grower of pot roses at Nahant, Mass., has brought out some decided opinions and some very interesting details. Mr. Roland believes that too little has been done to encourage the great amateur class of rose-growers to handle potted roses with success. From Mr. Roland's correspondence the Editor gleans the following wheat of practical wisdom:

Pot-grown roses, I believe, will eventually become the most popular of all plants for house decoration. They may be had in usable condition during eight months of the year. After they have done service inside, they are in a suitable condition for planting outside, where, if conditions are proper, they may continue to give pleasure for many years.

There are many fine varieties, equally useful as pot plants and for garden purposes.

The various ramblers and the good Hybrid Perpetuals can be had in fine condition from March 1 to July 1, while from July 1 to November 1 it would always be possible, if desirable, to have well-grown Hybrid Teas and dwarf ramblers blooming freely in pots.

Cultural methods are quite simple. All our plants used for potting are field-grown. The ramblers are staked, and as they grow in the field are kept tied to the stakes, the object being to get well-ripened canes. All late base growths are removed, as they would not have time to ripen.

In lifting these field-grown plants, care must be taken not to permit the roots at any time to get dry, and thus to lose vigor.

To have ramblers bloom during March and early April, field-grown plants lifted in the spring are cut back to within several inches of the base of the plant,

potted and "plunged"* outside in a good open position where they will receive full sunshine.

As these plants grow and the pots become filled with roots, they should be supplied liberally with liquid manure, because of their restricted root range. In fact, when in active growth at the roots and tops, unless on wet or soggy ground, there will be not much to fear from over-watering or over-feeding. They should be given plenty of space, so as not to crowd one another, and as they grow the canes should be trained upon stakes, to somewhat the form desired. There are many shapes available for easy handling with the pliant young canes—fan-shape, pyramid, globe, egg-shape, etc.



FIG. 4. A well-grown Rambler pot rose.

The plants intended for the earliest flowering should not be allowed to make growth so late that they cannot fully ripen outside.

When autumn arrives, much less water will be required. Indeed, if the late autumn weather proves wet, it may be found necessary to raise the pots so that the plants will more quickly dry out, and thus ripen their canes.

About December 1, according to the weather conditions where the work is done, the plants ought to be in suitable condition for repotting into the pots in which they are intended to flower. After potting they can be pruned and tied down into shapes as desired, always noting that the bloom shoots will arise from the spurs on the main canes of that year's growth.

If extra-large plants are desired, several well-developed plants may be put into one large pot or into a tub, according to the idea in mind.

The conditions suitable for growing roses for cut-flowers in a house are those quite suitable for bringing into bloom the various ramblers, except that when the plants are first brought in from the outside the temperature may be too high for plants not having active feeding roots. This can easily be remedied; where a cool house is not available, a cellar, pit or shed may be used to house the plants until they have made some new roots and are ready to break out into growth at the top.

About twelve weeks should be allowed to bring the earliest batches of plants into flower, and as the season advances much less time will be necessary to bring the different varieties into bloom.

All these remarks, I believe, will apply equally to the four principal groups which may bloom to advantage in pots; namely, the tall ramblers, the dwarf ramblers, the Hybrid Teas, and the Hybrid Perpetuals.

I add here a list of varieties suitable for different seasons:

From March 1 to April 1: Tausendschön, Hiawatha, Mrs. F. W. Flight, George Elger (dwarf), Ellen Poulsen (dwarf), Mrs. W. H. Cutbush (dwarf), Marie Pavie (dwarf).

*"Plunging" is sinking the pot in the open ground to the full depth of the pot.—
EDITOR.

From April 1 into June: Tausendschön, Hiawatha, Mrs. F. W. Flight, George Elger, Ellen Poulsen, Mrs. W. H. Cutbush, Marie Pavie, Dorothy Perkins, Lady Gay, Excelsa, White Dorothy Perkins, American Pillar, Jessie (dwarf), Maman Turbat (dwarf), Orleans (dwarf); also the following Hybrid Perpetuals: Frau Karl Druschki, Magna Charta, Mrs. John Laing, Ulrich Brunner.

From latter part of June to November: Orleans, Jessie, Ellen Poulsen, Marie Pavie, Perle d'Or. Teas: Double White Killarney, Mrs. Aaron Ward, Mrs. Charles Russell, Hadley, Mme. Caroline Testout, Lady Alice Stanley, Ophelia, Mrs. George Shawyer.

A Hundred Million Cut Roses?

AN EDITORIAL INQUIRY

WE ARE so accustomed to accept the beautiful finished rosebud at the flower store as a casual, incidental, and inevitable thing that few of the rose-lovers of the country consider what is back of the service involved in having this rose at command all over America, and every day in the year.

A hundred millions of cut roses in America? Yet why not? That would be not quite one a year for every man, woman, and child in the land. Does there exist anyone so hard-hearted as to either wish or believe that each free American should be restricted to but one rose per annum?

Information has been sought as to the trend toward color, habit, form and fragrance of the roses grown for cutting. A formula of inquiry was prepared and submitted to several of the ablest commercial men, whose criticisms were incorporated in it. Then all the names of the important actual producers were obtained, and to each one was sent the form, together with a personal letter urging a reply to the questions asked, in the general interest. A total of 111 inquiries brought 46 replies, the actual leaders in cut-flower production responding for the most part, wherefore it is believed to be fair to generalize from these replies in certain of the conclusions.

Below most of the questions following will be found the replies in order, stating the number of votes for the variety or quality preferred.

The first question asked was *Is the demand for cut roses in-*

creasing or decreasing? The answer was uniformly "Increasing," save in two cases.

The second question read: *What roses are now most popular in your own experience?* (Name three or four in order of preference, please.)

Replies:

Columbia	38	Killarney, Double White . . .	6
Ophelia	33	American Beauty	4
Premier	25	Mrs. Aaron Ward	4
Mrs. Charles Russell	19	Mrs. George Shawyer	2
Hadley	7	Hoosier Beauty	1
Sunburst	7	My Maryland	1
Milady	6	Minnetonka	1

Question 3: As between the various colors available in winter-grown roses, which do you find most in demand?

Replies:

Pink	10	Columbia	2
Dark Pink	5	Hadley	2
Light Pink	3	Killarney White	1
Mrs. Charles Russell	4	Red, Yellow and Pink	1
Premier	3	Red	1
Ophelia	3	Sunburst	1

Question 4: As between the Ophelia type of rose and those with many more petals, which do you prefer for sale, and which do you favor for growing?

Replies:

More petals	21	Columbia	2
Ophelia	9	Premier	2
Mrs. Charles Russell	3	Sunburst	6
		White	7

"Ophelia type and shorter stems." "Russell for sale; Columbia to grow."
 "Ophelia type by all means; they grow more quickly and open more quickly."

Question 5: Of the roses you are now growing, which produce most satisfactorily—

In quantity?

Replies:

Columbia	16	Mrs. George Shawyer	2
Ophelia	12	Hoosier Beauty	1
Premier	6	Killarney Pink	1
Mrs. Charles Russell	3	Milady	1
Killarney	3	My Maryland	1
Killarney White	3	Sunburst	1
		Mrs. Aaron Ward	1

In quality?

Replies:

Columbia	17	Ophelia	8
Mrs. Charles Russell	12	Hadley	3
Premier	11	Sunburst	1
		Mrs. Aaron Ward	1

In color?

Replies:		Hadley	4
Columbia	15	Milady	2
Mrs. Charles Russell	12	Pink	1
Premier	8	Sunburst	1
Ophelia	5	Mrs. Aaron Ward	1

In shipping endurance?

Replies:		Hadley	2
Mrs. Charles Russell	13	Milady	2
Ophelia	10	Sunburst	1
Columbia	8	Mrs. Aaron Ward	1
Premier	6		

An important question read: *If you could have a rose "made to order" for you, what would it be—*

In form?

Replies:		Dunlop	3
Premier	7	Mrs. George Shawyer	3
Hadley	6	Mrs. Charles Russell	3
Long, pointed bud	5	Kaiserin Auguste Victoria	1
Ophelia	4	American Beauty	1
Columbia	3		

"A good yellow, also a good red." "A large, pointed flower that will open perfectly." "A perfect Milady."

In color?

Replies:		Premier	1
Pink	7	Richmond	1
Hadley	4	Red	1
Ophelia	4	Dark velvety red	1
Mrs. Charles Russell	4	Clear rose-pink	1
Columbia	3	Yellow	1
White	3		

"Any but white or yellow." "Between Milady and Hadley." "Red or yellow."

In fragrance?

Replies:		Columbia	2
American Beauty	9	Hoosier Beauty	2
Premier	8	Perle des Jardins	2
Hadley	4	Mrs. George Shawyer	1
Ophelia	3	Sunburst	1
Tea	3	Sweet	1

In foliage?

Replies:		Sunburst	1
Ophelia	9	American Beauty	1
Columbia	8	Ample, good size	1
Premier	7	Big, green	1
Richmond	1	Hadley	1
Mrs. Charles Russell	1		

In blooming habit?

Replies:	Killarney	3
Columbia	Mrs. George Shawyer . . .	2
Ophelia	Sunburst	2
Premier	My Maryland.	1
"Free, producing both short and long stems." "Non-cropper."		

In certain eastern markets there seems to have been a considerable demand for the so-called "midget" roses. The inquiry concerning their importance developed the fact that they were a very minor matter, forming no serious part of the great rose movement.

The inquiry as to quantity reads thus: *Please give, if at all possible, an approximate statement, or even an estimate or guess, of the actual number of rose blooms you have cut during the year of 1919.*

Some of the growers evidently did not know, because they didn't reply. Yet there were 34 responses out of 46 returned blanks, and these total a cut or production during 1919 of 35,468,860 roses. The smallest number reported was 60,000; the largest 4,600,000. Twelve growers reported a million or more; eleven produced between 50,000 and 1,000,000; and eleven grew less than a half-million each. The average would indicate the production of at least a hundred million of cut-roses in the commercial establishments of the United States during the year 1919, and it is possible that the actual number of roses cut exceeded this figure by 50 per cent.

In order to ascertain the insect and disease situation, this question was asked: *What troubles, if any, have you had with insects and diseases during 1919?* The replies follow:

"Have not had any." "Very small." "No special troubles beyond those usually met in growing roses under glass." "None." "Nothing serious." "None." "None."

"A little trouble with rose midge, but steady fumigating remedied it."

"Hardly any save some thrip and green fly." "Have some leaf-rollers and have found some canker in Milady."

"None, thank God." "Crown-gall." "Rose midge." "The midge insect." "Black-spot." "No uncontrollable diseases." "Thrip and black-spot." "Black-spot is our greatest trouble." "A touch of black-spot." "Green fly and red spider only."

"None but the usual mildew, black-spot, green fly and some scale on Cecile Brunner." "Thrip." "The rose-midge is the worst trouble, but it is easy to overcome."

"Thrip and black-spot." "Leaf-roller, not very bad." "Black-spot, thrip and green fly." "Our worst trouble is mildew." "Strawberry beetle."

"A devil of a time with the new insect pest, the strawberry beetle."

As might be expected among the men who could grow an average of a million roses apiece, there were expressed "on the side" many opinions and desires. A man whose cut was 4,600,000 says, "I am inclined to guess that Columbia is the most satisfactory rose. We have over a hundred thousand plants."

Other glimpses into this correspondence follow:

"We are in need of a good yellow to take the place of Sunburst, which is a good grower and producer, but subject to weak stem."

"Hadley fills the bill as a rose, but has not been a commercial success because it is not prolific. Among the newer varieties of red roses I do not see one to fill the bill."

"There is a strong call at this time for a good white to take the place of White Killarney, and a good yellow as large and vigorous as Columbia."

"We need a red like Hadley in color, form of flower and fragrance, with the habit and growth of Shawyer and the keeping qualities of Columbia."

"The greatest need in our business is new roses, as we do not have either a good forcing red, yellow, pink or white rose today, and the only way to get them is for every rose-grower to study and practise hybridizing. The scale for judging new roses should be changed, and 50 points be given for productiveness; awards of merit should not be given to new roses unless they are more productive than our present varieties, no matter what other qualities they have."

"I personally think a Red Columbia would be the greatest achievement right now for both producer and seller."*

"We also need an enlightenment on the best fertilizers to use for roses, as this commodity is getting scarcer."

"Although our experience with Premier is still very limited, we believe it is an ideal type of rose. It is very double, with fine foliage, and makes a very quick growth. The form of the bud is good because the petals do not reflex like Columbia, making it a better shipper."

"What we need mostly today is a good white and a good yellow rose."

Expressions concerning other than rose qualities appeared in several cases. They are distinctly worth quoting from:

"There is need of a more perfect accounting system in the growing end of the florist business."

"We need more advertising with the public. In other words, we need publicity, salesmanship and education."

"With respect to rose-selling there is needed a standard system of grading roses. It seems that no two growers have the same method of grading. There are some who do not pick out crippled or deformed flowers, nor crooked-stemmed ones."

"Rose-growing for cut-flowers would be as good as ever if the three branches of the florist business would coöperate. The grower, the wholesaler, and the retailer must work together without distrust."

Such is the hundred-million rose story! Read with the ideals of the hybridizers, and with the record of their progress, it is a great possibility that 1920 and 1921 present.

*This desire runs parallel with the coming of the Red Columbia, as reported on page 125.—EDITOR.

The Rose City—Portland, Oregon

Compiled by THE EDITOR from Letters

FAVORED by a climate unexcelled for rose-culture, with soils varying from sandy loam to hard clay over gravel beds, and with a range of elevations from practically sea-level to an altitude of 1,200 feet, Portland, Ore., offers its citizens unusual opportunities for rose culture. To such an extent have they taken advantage of these gifts of nature that they have earned for Portland its title, "The Rose City."

As long ago as 1899, a handful of the rose-growers organized the Portland Rose Society. Since that time Portland has had its yearly rose show in which amateurs only have exhibited. In this show, there are usually about 500 displays made by between 250 and 300 individual exhibitors. In general, the English plan of exhibition is followed by displaying specimen blooms in boxes. Probably these box displays are the largest of their kind in America. To encourage the cultivation and showing of specimen blooms the Portland Rose Society lends the exhibitors whatever equipment they need.

During the past year, the Portland Rose Society has become affiliated with the American Rose Society and has now about 375 members enrolled. At the present time an active membership campaign is being conducted by President H. J. Blaesing, who predicts that Portland will eventually have a membership of 1,000 in the American Rose Society.

Although rose shows had been held for years in Portland, it was not until 1905, the year of the Lewis and Clark Exposition, that the citizens awakened to the realization that its roses were to be counted among the city's real assets—for the thousands of strangers who visited Portland during the exposition were unreserved in their praise of the wonderful blooms. In 1906 the citizens organized the first rose festival, and since that time the greater part of a week in June has been devoted to paying homage to the Queen of Flowers.

Much has been written about the great number of roses used during the festival week, but one has to visit Portland to comprehend the lavishness of the display. In the vehicle parade

alone 2,000,000 roses were used. These figures can be more readily understood when one learns that at least 3,000 roses are required to decorate an ordinary automobile so that it meets the conditions of the competition. For one parade 80,000 roses were used to decorate a single piece of fire apparatus. Last year a certain shipyard used over 100,000 roses in constructing a model of one of the ships it had built during the war. Visitors to the city are met at the train and are presented with not one bloom alone but a whole bouquet of blooms. At the rose show, and also in the Festival Center, where the city's florists and nurserymen make their display, roses are distributed with the greatest freedom.

In past years the Rose Festival, with which the annual rose show is now combined, was financed by private subscriptions from the business men of the city. Now that the Portland Rose Festival is a national institution which attracts thousands of people to Portland and thereby benefits the entire city, the Oregon Legislature, at its last session, passed a law permitting the county commissioners of any county in the state having a population of more than 100,000 to levy a special tax to pay the expenses of a county rose festival. The officials of the county in which Portland is located have levied a tax this year of nine one-hundredths of a mill, which will produce between \$30,000 and \$40,000. As the Rose Festival costs between \$50,000 and \$60,000, the balance of the fund for this year will be raised outside of the tax levy. Portland is possibly the only city in the world where such an entertainment as its Rose Festival is paid for from the public funds. The money is expended through a board of twelve directors who are chosen at a general convention made up of two delegates each from over 200 organizations.

It would be impossible to tell just how extensive is rose-growing in Portland. There are 838 miles of streets in Portland, and probably 200 miles of rose-hedges, for a favorite way of growing Mme. Caroline Testout, the popular rose of the city, is as hedges between the sidewalk and the curb. Visitors to the city can always have cut roses for the asking, and, indeed, sight-seeing cars have certain routes on which the property-owners have granted the passengers the privilege of cutting all the roses they desire.

The city government, through its Park Bureau, under the direction of Commissioner S. C. Pier and Park Superintendent C. P. Keyser, is progressive in rose-culture. In Peninsula Park is one of the finest show gardens in the country. It covers about four acres and contains 14,000 rose plants and approximately 1,100 separate named varieties. In Mt. Tabor Park is a nursery at which are grown annually thousands of roses from slips. These are distributed each spring to citizens making requests for them. In Washington Park the Park Bureau has put in the first unit of what will be, in their opinion, the finest and most comprehensive rose-garden, either in the United States or Europe. It was originated by Jesse A. Currey, and the work was started under the direction of Portland's mayor, Hon. George L. Baker, who was Park Commissioner at that time. This garden, which will cover nine acres, will have among its many features a test section for trying out, in competition, all the new roses, a collection of the best roses, a botanical and historical section, a section of highly fragrant roses, a rose theatre covering about two acres, greenhouses and an experiment station, and a large unit to be known as a "cutting garden," where visitors may have as many blooms as they desire.

No review of rose-growing in Portland would be complete without mention of the Royal Rosarians, an organization probably without a parallel in this country. It is composed of one hundred of the leading men of the city who, during the Rose Festival and at other times when the city is entertaining distinguished visitors, act as the official host of the city. Each member of the society stands sponsor for one rose on the official list and is supposed to grow that particular rose in his garden.

To sum up, rose culture has been the forerunner of democracy in Portland. The butcher, the baker, the lawyer, and the banker, all grow roses and exhibit them side by side. Only last year, for instance, one of the highest prizes for the best rose exhibited was captured by a cobbler's son and the other by the wife of a retired capitalist. The Portland Rose Society has been the ruling factor in the promotion of this rose-growing democratic atmosphere.



PLATE XIX. Montgomery Co.'s New Hybrid Tea Rose, CRUSADER
(See page 133.) (Registered with American Rose Society, 1919)

A June Day in a Garden of Roses

By THE SECRETARY

TOO rare it is in the United States to find anywhere
“A beautiful garden of roses,
Kissed by the morning dew,”

and when one discovers such a spot it gives keen enjoyment.

Few of the members of the American Rose Society realized, as they traveled to Chestnut Hill, Philadelphia, Pa., on the intensely hot June 4, 1919, the wonderful show of beauty which Capt. George C. Thomas, Jr., had for them. Previous to the general meeting, which was held in the rose-garden at 2 P.M., Captain and Mrs. Thomas entertained the officers, Executive Committee, and a few friends at a delightful luncheon.

Captain Thomas took advantage of this occasion to christen his seedling “720,” a beautiful rich red, semi-double climber, “Dr. Huey,” in honor of his friend Dr. Robert Huey, of Philadelphia.* In his address, he brought to mind that it was Dr. Huey who first interested him in roses and rose-breeding. It was in this rose atmosphere that Dr. E. M. Mills, of Syracuse, N. Y., on behalf of the Executive Committee, presented to the retiring president, Benjamin Hammond, a beautifully embossed, leather-bound copy of Captain Thomas’ “The Practical Book of Outdoor Rose-Growing,” as a token of appreciation from the officers and Executive Committee for his fourteen years of valuable service to the Society—twelve years as secretary and two years as president. Mr. Hammond responded, voicing the pleasure which the expression of esteem gave him, speaking also of how highly he should value the book because of the associations it would recall to him, and because it was presented to him in the wonderful rose-garden of the author.

The rose-garden was at its best, and exclamations of surprise and joy were many as the members greeted their favorites or saw new beauties. They were all there, from the old, well-known varieties to the rarer, more recent introductions. On their smiling faces were expressions of welcome as unmistakable as if from spoken words. Notable were Captain Thomas’ own new

* See Plate VIII, facing page 33.

seedlings. It was with difficulty that the visitors were lured from the living beauties in the garden to the seats in the shade of the trees, where ex-President Hammond introduced Captain Thomas, who spoke a few words of welcome. He expressed the pleasure it gave him to share his roses with others and he hoped the guests would make the garden theirs for the afternoon. Mr. J. Horace McFarland discussed "American Roses," emphasizing the value of the work Dr. Van Fleet and Captain Thomas are doing in introducing types of roses suited for all American conditions. He was followed by the "silver-tongued orator from Indiana," the rosarian who is universally known and loved, Mr. E. G. Hill. He also paid a tribute to Dr. Van Fleet's, Captain Thomas' and John Cook's work in rose-breeding, stating that the infusion of the hardy blood of the Rugosas and Wichuraianas with that of the Teas and Hybrid Teas was sure to develop new varieties suited for outdoor growing in the Middle West.

Mr. Robert Pyle, the newly elected president, closed the formal program of the afternoon, emphasizing the value of the work the Society is doing in reaching a large number of rose-lovers and in carrying to them information which is of inestimable value in rose-growing.

The remainder of the afternoon was spent among the roses. Among the seedlings a single white was accurately described by Captain Thomas as a hardy "bush Cherokee;" the flowers were pure white and nearly four inches across; "46A" was a very promising single white climber; "51A," a single vermilion; "96C," of the shade of Crimson Champion; "36M," a pink, free-flowered variety with long-pointed buds in large clusters; and "89A," a single pink climber. In the garden of standard varieties, Frau Melanie Niedick, a salmon-yellow with long-pointed buds, was exquisite. Other beautiful varieties were Constance, an intense canary-yellow; Frau Bertha Kiese, a pink on yellow ground; and Donald Macdonald, an intense orange-carmine.

The combination of gracious hospitality, of a wonderful garden of old and new roses, and a group of men and women devoted to the Queen of Flowers made this June day one never to be forgotten by those present.

New Roses Scientifically Tested

Awards Made by the Portland National Rose Test-Garden

By JESSE A. CURREY

READERS of the Annual will be interested in the result of the scientific two-year test of all the newer rose seedlings and sports which has been made at the Portland National Rose Test-Garden at Portland, Ore.

Columbia, the new silver-pink rose originated by E. G. Hill, of Richmond, Ind., has been found to be the best variety for outdoor culture. It therefore received the Gold Medal offered by the American Rose Society, as well as the Medal of the City of Portland. It has also been accorded the highest American rose honor in the award of the Hubbard Gold Medal, given by the American Rose Society once each five years.

Second honors, and also the special prize of the Portland Rose Society for the best rose produced by an amateur, were awarded to seedling "4A" (see plate IX), entered by Capt. George C. Thomas, Jr., of Chestnut Hill, Philadelphia. This rose will be formally named at the Portland Rose Festival next June.

The Portland test is probably the most comprehensive of all those given to new roses and sports. The method of scoring* used is that described in the 1917 Annual, and was originated by Dr. Robert Huey, Captain Thomas, and the writer.

The methods of testing differ from those used in other gardens. The testing-ground is here divided into three sections. In the first, all roses are given special care and attention to insure their fullest development. In the second, they are given the same treatment that the average gardener gives his roses. In the third section, which is purposely placed at a considerable distance from the others, the plants receive no care, except minor cultivation. To ascertain the natural disease-resisting qualities of the plants, they are neither sprayed nor protected from insects. The scores of all three sections are averaged.

This system of scoring was highly commended by the judges, who were Rev. S. S. Sulliger, of Kent, Wash., a judge at the Portland Rose Show for the past twelve years, a representative

*Method of scoring used by National Rose Society of Australia is given on page 152.

of both the American Rose Society and the Portland Rose Society at the London Show in 1910, and one of the best posted rosarians of the Pacific Northwest; J. P. Todd, of Seattle, a leading amateur; and Arthur Bowman, of Portland, an experienced rose-buyer of the Portland Seed Company.

The full list of prize-winners is as follows:

Best rose for general outdoor cultivation. Gold and Silver Medals by the American Rose Society: First, Columbia, produced by E. G. Hill, of Richmond, Ind. Second, Seedling "4A," produced by Capt. George C. Thomas, of Philadelphia.

Best dwarf bush for general outdoor cultivation.—Medals by the city of Portland: First, Columbia, produced by E. G. Hill, of Richmond, Ind. Second, Miss Lolita Armour, produced by Howard & Smith, of Los Angeles, Calif.

Best climbing rose for general outdoor cultivation.—Medals by the city of Portland: First, Climbing Lady Hillingdon, produced by Elisha J. Hicks, Hurst, Berks, England. Second, Bonnie Prince, produced by Thomas J. Cook, of Boston, Mass.

Best rose for outdoor cultivation produced by an amateur. Special prizes by the Portland Rose Society: First, Seedling "4A" produced by Capt. George C. Thomas. Second, Bonnie Prince,* produced by Thomas J. Cook, of Boston.

Best rose for outdoor cultivation produced on the Pacific Coast. Special prize by the Portland Test-Garden Association: First, Miss Lolita Armour, produced by Howard & Smith, of Los Angeles, Calif. Second, Oregon Ophelia, produced by Clarke Bros., Portland, Ore.

Altogether thirty-five seedlings and sports were under test, and as no rose was scored which had been planted since the spring of 1918, all had at least two growing seasons. Some of the roses received from England and Ireland which have been slow in developing will be tested another season. The only rose to receive a perfect mark for novelty was Miss Lolita Armour, which was the sensation of the test.

The average number of blooms produced by the different varieties scoring more than 80 points follows:

Columbia	74	Climbing Lady Hillingdon	104
Seedling "4A"	189	T. F. Crozier	52
Miss Lolita Armour	44	Rose Victory	71
Mary Hill	73	Bonnie Prince	150
Bloomfield Abundance	301	Double Ophelia	87
Oregon Ophelia	127	May Martin	149
Los Angeles	74	Teresa Morley	55
Rose Premier	69	H. D. M. Barton	53
Mrs. Walter T. Sumner	97	Seedling "601"	58
Mrs. Dunlop Best	81	H. P. Pinkerton	44
Felicity	133	Golden Spray	53

*Bloomfield Abundance, produced by Captain Thomas made a higher score, but under the rules of the garden no one can win two prizes in one class.

The scores made by the varieties which received an average of more than 80 points, and giving the number of average points each scored for the various individual qualities, follow:

PORTLAND NATIONAL ROSE TEST-GARDEN—1919

Points scored on individual qualities by all roses with a total score of 80 points or more in 1918 and 1919. Compiled at Portland, Ore., by Jesse A. Currey, Jan. 12, 1920.

Maximum Number of Points	Individual Quality	NAME OF ROSE										
		Columbia	Geo. C. Thomas, Jr. Seedling "4A"	Miss Lolita Armour	Oregon Ophelia	Bloomfield Abundance	Mary Hill	Los Angeles	Rose Premier	Mrs. W. T. Sumner	Mrs. Dunlop Best	Felicity
5	Novelty . . .	4.33	4.	5.	3.33	4.	2.33	4.	2.66	3.33	3.	.66
10	Color	10.	8.33	10.	9.33	7.	10.	9.	10.	9.33	9.33	8.
5	Fragrance . .	5.	5.	3.66	4.66	5.	5.	4.	4.66	4.66	3.	4.66
10	Lasting . . .	10.	10.	9.33	10.	10.	9.33	8.66	10.	9.	9.	9.
10	Shape	9.66	8.	9.33	8.66	9.	10.	8.33	9.66	8.33	10.	8.
5	Substance . .	5.	4.33	5.	3.66	4.	5.	5.	5.	5.	5.	5.
5	Petalage . . .	5.	5.	5.	5.	5.	3.66	4.66	5.	2.66	4.33	5.
5	Size	5.	4.66	5.	5.	4.66	4.66	5.	5.	4.66	4.66	4.66
15	Blooming . . .	15.	15.	12.33	15.	15.	14.66	14.33	14.	15.	14.	15.
10	Hardiness . .	10.	10.	10.	10.	10.	10.	10.	10.	10.	9.33	10.
10	Foliage	10.	10.	9.	9.	10.	9.	9.66	7.	10.	10.	10.
5	Growth	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.
5	Stem	4.66	4.66	5.	4.66	4.66	4.66	4.66	4.33	5.	4.33	4.66
100	Total	98.66	94.	93.66	93.33	93.33	93.33	92.33	92.33	92.	91.	89.66

Maximum Number of Points	Individual Quality	NAME OF ROSE										
		Climbing Lady Hillingdon	T. F. Crozier	Victory	Bonnie Prince	Double Ophelia	May Martin	Teresa Morley	H. D. M. Barton	E. G. Hill Seedling "601"	H. P. Pinkerton	Golden Spray
5	Novelty	2.66	3.66	1.66	4.	1.66	.66	2.33	1.33		1.66	2.
10	Color	10.	10.	9.33	9.	8.33	9.33	9.	8.66	5.5	9.33	8.66
5	Fragrance . . .	4.	2.33	4.33	3.	4.	4.	5.	2.66	5.0	4.66	4.33
10	Lasting	8.66	8.	8.66	8.33	8.33	7.	8.33	8.33	10.	7.33	5.66
10	Shape	9.33	8.	9.33	7.66	8.33	8.33	9.	7.33	7.5	8.33	7.33
5	Substance . . .	3.66	5.	4.66	3.66	3.33	3.66	4.66	4.33	4.	4.33	4.33
5	Petalage	3.33	4.66	3.33	3.66	5.	4.	5.	5.	5.	3.33	2.33
5	Size	4.33	5.	9.66	4.33	4.	3.33	3.33	4.66	5.	4.33	5.
15	Blooming	15.	12.66	13.	13.33	15.	15.	14.	11.66	11.	9.33	13.33
10	Hardiness . . .	8.33	10.	10.	10.	9.33	10.	10.	10.	10.	10.	10.
10	Foliage	10.	9.	8.66	8.33	8.	9.66	5.	10.	10.	8.66	9.
5	Growth	4.	4.66	5.	5.	5.	5.	4.33	3.33	4.	4.66	4.
5	Stem	5.	4.33	4.66	5.	4.66	4.66	4.33	4.66	4.5	4.66	4.66
100	Total	88.33	87.33	87.33	85.33	85.	84.66	84.33	82.	81.5	80.66	80.66

Getting Better Rose Descriptions

By THE EDITOR

A KIND correspondent in Illinois, a member of the American Rose Society, writes me under date of Jan. 24, 1920, as follows:

"From a leading 1920 rose catalogue I cull the following 'descriptive' terms as aids to the amateur buyer. These apply to a list of 113 Hybrid Teas:

finest	very strong	simply immense
enormous	very fragrant	particularly handsome
perfectly hardy	very graceful	full and magnificent formation
great	very best	magnificent, large, full,
greatest	superb build	double blooms
remarkably	marvelous profusion	profuse bloomer
magnificent	gorgeous sight	without a superior
extremely hardy	magnificent showing	perfection in every line
wonderful	delightfully fragrant	absolutely hardy
immense in size	most remarkable	exceedingly free-blooming
most delightfully	extremely large	hardy everywhere
splendid substance	bold and massive	most beautiful
ideal variety	in constant bloom	highly fragrant
striking effect	most brilliant	unusual attractiveness
model of perfection	blooming constantly	magnificent giant
very popular	delightful fragrance	marvels of beauty
very large	perfect finish	extra hardy
very fine	strong, robust grower	even more dazzling
very unique	phenomenally strong	peerless
very lovely	very largest size imaginable	massive petals
very free-flowering	produced a sensation	highly double
very distinct	monster blooms	perfectly double
very full	constantly in flower	magnificent formation
very sweetly	large, bold, double bloom	
very vigorous	most popular	
very attractive	creates a sensation	

"Some of the roses would blush from mere modesty could they read their own descriptions. The terms are used over and over again, presenting on the whole a dead level of indiscriminate praise from which the untutored but hopeful amateur will try to select.

"I learned more about roses from the praise that one prominent dealer left out of his book than from all the other catalogues put together. A few good varieties, clearly described, with such faults as they have admitted, would be more instructive than to try to find place in the catalogue for all the roses propagated in the last twenty years, with such lavish praise.

"Respectfully,

"W. A. ROEBUCK."

Mr. Roebuck voices picturesquely a very real disadvantage which amateur rose-growers now endure. True, not all catalogue men describe with the aid of flamboyant adjectives, but very few indeed of the descriptions are accurate to the extent of stating the disadvantages as well as the advantages of the roses they offer. For several years there has existed the desire

to prepare a catalogue of roses in American commerce which would accurately describe those roses. At first this did not seem to be a great task, but when it was taken up with the thought of completion, its complexity soon became apparent.

To begin with, when is a rose in American commerce? Is its presentation, quoted from a foreign description, in one catalogue, which thereafter forgets it, sufficient to give it a permanent place? If not, what is the criterion which could entitle it to a place in a catalogue of roses issued by the American Rose Society?

Then, the next difficulty appeared in scanning existing available descriptions. Not many who describe roses tell all about their own pets. Too often essential items are omitted, because the describer has taken them for granted. Too often, also, descriptions are flagrantly astray or obscure.

As the best way to begin a catalogue, more comprehensive and more accurate than any existing in the world today, a card of inquiry was prepared, and this card was sent to a dozen or more acute amateur and professional rose-growers and rose-lovers for suggestions and criticisms. The result was finally the preparation of the standard card reproduced on page 112, which on its two sides will present all there is to know about a rose, provided the describer checks it carefully.

Some thousands of these cards have been sent out. It is now the rule, when a new rose is learned of, to send to its originator, if he can be found, this card, and to urge him to fill it out. Some of our foreign friends were quite reluctant to do this, referring us instead to their adjectival catalogue descriptions, but, upon plainly saying that we would not mention a rose so described, they have usually "come across" with the checked descriptions on the standard card. On pages 126 to 136 will be found many descriptions prepared directly from these checked cards, all such descriptions having an asterisk preceding the name.

In 1920 it is hoped to place many of these cards in the hands of observers who have access to many varieties, and to have them come back with descriptions accurately checked. There would then be, where duplicate descriptions occurred, as would be and ought to be the case, a careful scanning and combination so that the resulting description would either be a composite or

would be varied in respect to the behavior of a particular rose in various climates and locations and for various uses.

The members of the American Rose Society who are interested are asked to write the Editor for these cards, which, if there is a promise to return them with reasonable promptness, will gladly be supplied free of cost to responsible inquirers.

AMERICAN ROSE SOCIETY'S OFFICIAL RECORD CARD OF ROSE INFORMATION

Name _____ Class _____

Originator _____ Introducer _____ Year _____

Parentage _____
(If sport, name parent variety)

Type _____
(An resembling to form La France, Ellernay, Baronesse Rothschild, or some other well-known rose.)

BUD—Size: Very large. Large. Medium. Small. Form: Long-pointed. Ovoid. Globular.
Color: (If different from that of bloom.)

BLOOM—Size: Very large. Large. Medium. Small. Bloom borne: Single. Several together. In clusters.
Form: Full. Open. Cupped. High center. Globular. On stem: Long. Medium. Short. Strong. Normal. Weak.
Lasting Quality: Very good. Good. Fair. Poor. Petal-perisence: Drop off cleanly. Hang on.
Fragrance: Slight. Moderate. Strong. (Note any peculiarities)
Color: (Give one general color, with variations, if any, at center, at edge of petals, and at back of petals.)

*Single and rose petals, semi-double, ten or more rows petals, double, full, very double, many petal and stem.

OVER

Name _____

FOLIAGE—Quantity: Abundant. Normal. Sparse. Color: Light green. Normal green. Dark green. Bronzy.
Texture: Lustrous. Glossy. Soft. Wrinkled. Size: Large. Medium. Small.

BASE AND TWIGS—Color: Green. Reddish brown. Other color. Disease-resistance: Mildew. Blackspot. Rust. etc.

GROWTH—Very vigorous. Vigorous. Moderate. Poor. Habit: Climbing. Trailing. Upright. Bushy. Dwarf.

SIZE AND ASPECT—BLOOMING—Quantity: Profuse. Abundant. Free. Moderate. Sparse. Number blooms in season _____
Time: May. June. July. Aug. Sept. Oct. Continuously. Continuous. Intermitting. _____ weeks.

AVERAGE HARDINESS—Unrated. Type: Free to _____ inches. Free to ground. Winterkills.

AWARDS—

Name of person reporting _____

Date _____ Address _____

Those who report on this card are urged to give FULL INFORMATION if possible. Fill in blank spaces and underline words which describe the rose named. Any additional information may be written below.

*Mention height when well grown, number of trunks in same hole, other particularities as form to the plant.

RETURN THIS CARD TO AMERICAN ROSE ANNUAL, HARRISBURG, PA.

OVER

A plan has been devised under which it is hoped to present in the 1921 Annual certain standards for color description, using a novel method of no complexity by which the hues of any rose may be accurately described. This method contemplates the use of rose texture as well as rose colors in descriptions.

Let us get rid of the guff and gush and stuff and nonsense in rose descriptions, so that American rose catalogues will come to be closely accurate, stating the facts upon which good people will buy many more roses than they now buy upon "hot air."

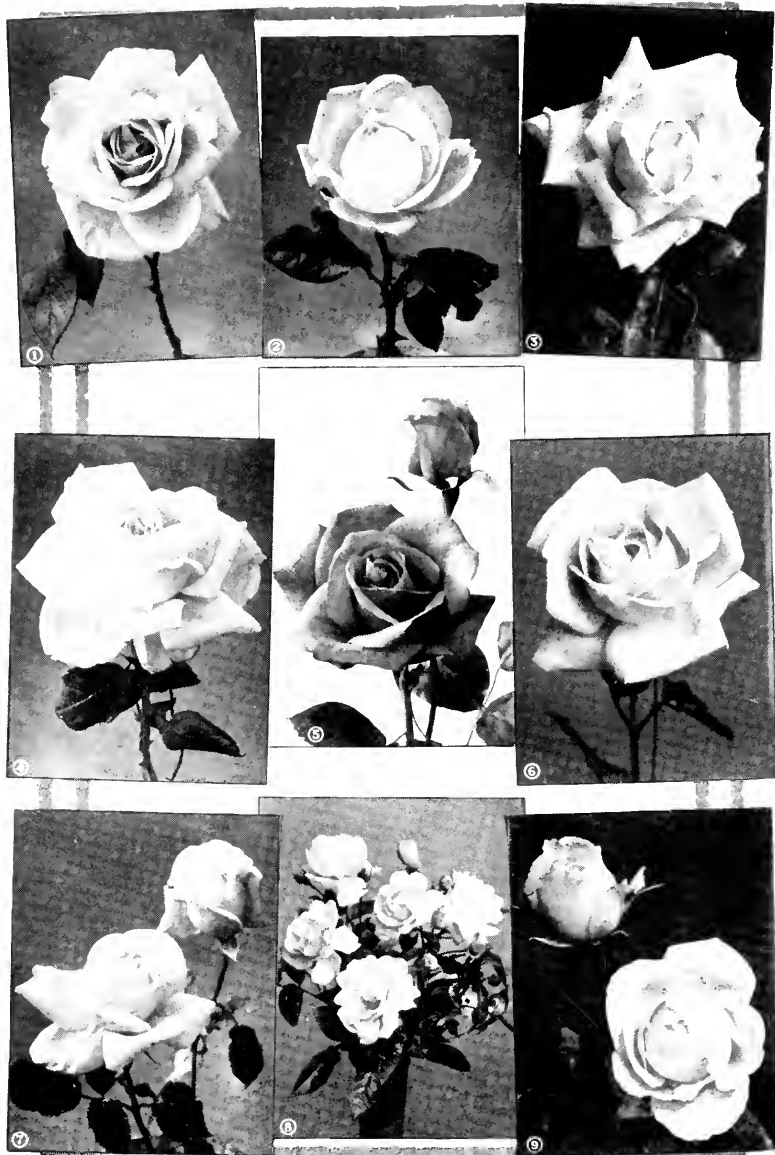


PLATE XX. THE PRIZE-WINNING ENGLISH ROSES OF 1919

1, Mrs. Henry Morse; 2, Mrs. Arthur Johnson; 3, Martha Drew; 4, Mrs. Charles Lamplough;
 5, Victory; 6, Miriam; 7, Rose Berkeley; 8, Evelyn Thornton; 9, Irene Thompson.
 (Photographs by courtesy of Courtney Page, Hon. Sec. National Rose Society of England)
 (See page 115)

The New Roses

AN EDITORIAL SURVEY

To acquaint the members of the American Rose Society with rose progress the world over is a function of the American Rose Annual. This year the showing is rather extensive, due to the natural activity abroad following the war. It is believed the survey which follows includes all or nearly all varieties offered in commerce in Europe or America, as well as some of which advance descriptions have been obtained.

To make descriptions completely accessible, an index follows, referring to the page on which information may be found.

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New English Roses of 1919

By COURTNEY PAGE

Hon. Secretary National Rose Society of England

EDITOR'S NOTE.—It is with much gratification that we present this friendly and fraternal discussion of the new English roses which have passed the critical inspection and received the approval of the experienced authorities of the great rose organization of which Mr. Page is the efficient Secretary. (These roses are also critically discussed on page 118 by Mr. Wettern.) Through Mr. Page's further courtesy, we are able to show pictures (in Plate XX, facing page 112) of nine of these new roses. Those thus marked (†) are illustrated.

It is proper to take this opportunity to mention the desirability for American rose-lovers of membership in the National Rose Society of England, by all means the largest and most influential rose organization in the world. Members receive the notable Annual and other publications of the Society. The cost is a half guinea—about \$2.50—which may be forwarded by a postal order drawn to the National Rose Society, and mailed to Mr. Courtney Page, Hon. Secretary, 25 Victoria St., Westminster, S. W. I., London, England.

THE raising of new varieties of roses in Britain has made very rapid strides during the past ten years. Prior to the war, it was quite a common sight to see from fifty to one hundred new varieties staged for an award at any one of the National Rose Society's exhibitions. The exigencies of the war very naturally acted as a setback, but now that strife is hushed, we were able, during 1919, to get back to somewhat normal times again.

The origination of new varieties of roses is not now entirely brought about by the trade. Amateurs are taking a hand in their production, and one looks forward to seeing, during 1920, a very large addition to the present existing varieties of roses.

New varieties of roses are, in this country, placed in two sections: (1) exhibition roses; (2) garden and decorative roses. By the term "exhibition rose," it is understood that that particular variety is best suited for staging in exhibition boxes or for specimen blooms only. A "garden and decorative rose" is understood to be one best suited for general cultivation.

A Gold Medal and a Certificate of Merit are the awards available to new varieties, and not less than six blooms of any variety may be staged. The awards are made at the National Rose Society's shows, by a specially appointed committee, to roses grown under prescribed conditions, and the roses that receive the highest award, the Gold Medal, are known as "Gold Medal

roses." The primary object of these awards is to encourage the raiser in his efforts to produce new and improved varieties.

When the awards are made, the new roses are not yet in commerce. The raiser sets up his blooms for exhibition, accompanied by a plant of the variety shown. The New Seedling Rose Committee has to decide on its merits: Is it of merit as a novelty; is it an advance on existing varieties; does the plant submitted indicate a reasonably vigorous habit of growth; is it free-flowering; what are its qualities as to freedom from mildew, sweetness of scent, etc., according to the section to which it belongs?

Of the numberless seedlings raised, a very small number are ever submitted for an award. That well-known rosarian, Mr. Frank Cant, when visiting the renowned Irish raiser, Hugh Dickson, at Belfast, while walking around the nursery grounds, came across a wagon loaded with rose trees. On inquiring of Mr. Dickson their destination, he was told, "the trash fire." They were the new seedling "no-goods."

The Certificate of Merit is given when a new variety is not, when shown, up to the high standard required by the New Seedling Committee, and it means that they desire to see that particular variety again at a future date. These two awards have now been so generally recognized by raisers of new roses that very few new varieties of merit are now sent out without one or the other of these awards attached to their names.

Lately there has been, for some reason or other, a tendency on the part of a certain section of the gardening press, to depreciate the value of the Gold Medal award. It is quite easy to criticize after the event, but, you on your side may rest assured that the Gold Medal takes some effort in winning, and that the award is made on merit, and on merit alone.

For our American friends I am glad to describe briefly the Gold Medal roses of the year 1919: [Those followed by this sign (†) are illustrated in Plate XX, opposite page 112.—ED.]

Mrs. Charles Lamplough, H.T.† (S. McGredy & Son.) An enormous, full, exhibition rose, with broad, shapely petals. The color is a clear cream. An ideal back-row bloom, lasting well. The plant exhibited was of vigorous habit, which is a good sign, as one expects only robust growth with the latter-day enormous blooms. In commerce.

Mrs. H. R. Darlington, H.T. (S. McGredy & Son.) An enormous, finely shaped bloom, almost identical with *Mrs. Charles Lamplough*, with the excep-

tion of color, which is a pale yellow. A free, lasting exhibition Rose. In commerce.

Clara Curtis, H.T. (Alex. Dickson & Sons.) A very beautiful rose with large and very finely formed blooms, quite up to exhibition form. The color is a clear Marechal Niel yellow, and the perfect blooms are strongly tea-scented. This appears to be the rose for which we have long waited—a dwarf-growing Marechal Niel—and the raisers should be congratulated on the result of their effort. It was awarded the Silver Medal at the Summer Show for the best Hybrid Tea exhibited by a nurseryman. In commerce in 1920.

Martha Drew, H.T.† (S. McGredy & Son.) A fine, large-petaled rose of vigorous habit. The large blooms, which are carried erect on long, stiff stems, are of a fine pointed shape; sweetly scented. The color—flesh-tinted rose—somewhat reminds one of Mrs. Theodore Roosevelt. It is one of the prettiest varieties we have had for some time.

Victory, H.T.† (S. McGredy & Son.) A very fine dark red rose of vigorous growth. The moderately scented blooms are well shaped, with high-pointed center, and are carried on long, stiff stems. The foliage is a pretty olive-green, making the bloom very attractive. It promises to become a very popular variety for bedding and growing under glass. In commerce.*

Mrs. Henry Morse, H.T.† (S. McGredy & Son.) The raiser has given us some very fine varieties, but I very much doubt if he has produced a finer rose than this. Of very vigorous habit and the blooms are long and shapely, of a lovely bright pink, shaded salmon, deeper at the base, with a distinct tea scent. An ideal rose for bedding and pot-work. May best be described as a glorified Mme. Abel Chatenay. In commerce.

Independence Day, Per. (Bees, Ltd.) Mme. Edouard Herriot × Souv. de Gustave Prat. The blooms are of a good shape and are carried erect on strong stems. The color, a bright flame, is very attractive. The foliage is a bright, shiny dark green, and there was no trace of mildew or black spot to be detected in the unusually large, massed exhibit. This rose marks a new era in the Herriot type, the blooms being erect and the center petals taking a more pointed shape. It is a good grower and will be excellent for garden and bedding purposes. In commerce.

Irene Thompson, H.T.† (S. McGredy & Son.) This is a further development of the Marquise de Sinety type of bloom; globular in shape, and of a deep orange color; tea-scented. The plant exhibited was of vigorous habit, and only slightly tainted with mildew.

Mrs. C. V. Haworth, H.T. (Alex. Dickson & Sons.) One of the prettiest decorative roses the raisers have yet given us. The color is somewhat difficult to describe, being a lovely combination of pink, orange, and yellow. The flowers are well formed and carried singly on long, stiff, and upright stems, while the neat, dark green foliage adds greatly to its charm. Altogether a beautiful rose. In commerce.

Miriam, H.T.† (Rev. J. H. Pemberton.) The blooms of this rose are large, full, and of somewhat globular form; slightly fragrant. The half-open buds are very shapely and it is then that the Rose is seen at its best. The color is a deep orange-salmon, becoming lighter as the bloom expands. The growth is vigorous and upright. An ideal bedding rose. In commerce.

*There is an American "Victory," registered with the American Rose Society, April 6, 1918. The duplication of names is deplored as tending toward confusion.—EDITOR.

The secondary award, or what I have explained as a suspense award, is the Certificate of Merit, and that honor was given in 1919 to:

Captain F. Bald, H.T. (Alex. Dickson & Sons.) A very large-flowering rose with fine, pointed center and huge, shell-shaped petals. The color is a soft, dull, rosy crimson. The plant is of vigorous habit and fairly free from mildew. In commerce.

Rose Berkeley, H.T.† (S. McGredy & Son.) A very pretty rose, with long-pointed, bright yellow blooms, very sweetly scented. It reminds one of Iona Herdman, but the plant is altogether a better grower and free from mildew. An attractive and effective rose for bedding. In commerce.

Sceptre, Per. (S. McGredy & Son.) Of similar growth to The Queen Alexandra Rose. The blooms, however, are carried erect, with a fine, pointed center, which is an improvement. The color is a bright flame, shaded orange at the base, the reverse of the petals a dull yellow. Useful and attractive for bedding. In commerce.

Mrs. Arthur Johnson, H.T.† (S. McGredy & Son.) A fine type of rose of very vigorous growth. The blooms, which are of a good shape, are carried erect on straight stems. The color is a rich orange-yellow, changing to chrome-yellow as the blooms expand. Slightly scented, and free from mildew, it will make a fine bedder. Altogether a fine rose, only narrowly missing the premier award. In commerce.

Sweetness, H.T. (S. McGredy & Son.) A very pretty bedding rose of fine form, the perfectly formed blooms being carried erect on long, stiff stems. The color is a pleasing shade of soft, intense rose, shaded scarlet. Very sweetly scented.

Hawthorn Scarlet, T. (Alex. Dickson & Sons.) A brilliant, velvety scarlet-crimson rose, with shapely blooms, sweetly scented; a vigorous grower. It appeared to be somewhat impatient to heat. A bedding rose after the style of Red-Letter Day.

Countess of Warwick, H.T. (W. Easlea.) This rose reminds one somewhat of Mrs. Foley-Hobbs, though the blooms are not quite so large, but they are, nevertheless, very attractive; tea-scented. The color, a bright creamy yellow, is of particular charm by reason of the pale pink edges of the petals. In commerce 1920.

Prince of Wales, H.T. (W. Easlea.) A very fine rose, and one that will take higher honors later on. It is one of those broad-petaled, high-pointed center, very sweetly scented roses, of which we stand so much in need for bedding. The color is a bright rosy scarlet, the outer petals shaded to a clear rose. The growth is vigorous and branching, ideal. In commerce 1920.

Tim Page, Per. (Courtney Page; introduced by W. Easlea.) A rich daffodil-yellow, quite distinct in shade from Golden Emblem, and while it is not quite so handsome in form, it should prove a grand garden rose, as its growth is somewhat similar to Louise Catherine Breslau. Very sweetly scented. In commerce 1920.

Evelyn Thornton, D. Poly.† (Bees, Ltd.) A free-growing, little Polyantha rose of dwarf and bushy habit. The blooms are of a soft pink color, with a golden glow at the base of petals, and golden stamens that make the blooms very attractive. Perpetual flowering. In commerce.

In my opinion the best roses of the year are Mrs. Henry Morse, Martha Drew, Victory, and Mrs. Arthur Johnson.

New Roses in Great Britain

By HERBERT L. WETTERN, London, England

EDITOR'S NOTE.—It is in line with our desire to give American rose-growers time- and money-saving information upon all the new roses anywhere produced that we present three discussions of what Europe has to offer of 1919 varieties. Mr. Wetttern's angle of description is most interesting, and taken with Mr. Courtney Page's official determination (see page 114), and the French point of view, as indicated in Mlle. Therese Turbat's translation of the report of the trials in the Bagatelle Rose-Gardens, on page 122, we may at least have our eyes open as to the new sorts.

*"Is not old wine wholesomest, old pippins toothsomest?
Old wood burns brightest, old linen wash whitest;
Old soldiers, sweethearts, are surest, and old lovers are
soundest."*—CHARLES KINGSLEY.

AND yet, in spite of all, the keen rosarian craves for new roses! Old lovers may be the soundest, and, in the majority of cases, they will undoubtedly prove so, for most of the new roses placed on the market every year are soon "lost to sight" without even being "to memory dear."

It is the march of civilization; everyone wants to be up-to-date. But why, it may be asked, should new roses be preferred to "my grandmother's roses"? Chiefly because with old roses there was but one crop of bloom, whilst now the perpetual blooming habit is so much sought after—and rightly so, too—that one expects roses to bloom almost continuously from May to December.

Whilst such great strides have been made in this direction, there has certainly been a falling off in the matter of scent, for the majority of new roses produced fall short of the old sorts in this respect, in spite of the fact that judges of new roses are understood to give points for scent. On the whole, however, the race is improving, and the flowers have better shapes and colors which last longer, both on the plants and as cut blooms.

The keen amateur, thirsting for knowledge, has little opportunity of gaining information except by seeing the new rose blooms at shows and by reading descriptions of them in trade catalogues and horticultural literature.

At the shows the blooms alone are exhibited, though occasionally one may see a specimen plant deposited on the staging to show the growth. Nurserymen's catalogues are so descrip-

tive, especially in regard to color, as to be positively bewildering. One of the newest of new roses is thus described: "Cinnamony apricot, opening to delightful biscuit fawn ochry buff, reflex of petals rose-cerise, guard petals flamed rose and zoned prim-rose." How unique! What a mixture of colors, fruit, spice, and everything nice! One wonders whether "the language of flowers" is synonymous with "flowery language."

Unless the same keen amateur can visit the raisers' grounds in various lands, from County Down to Lyons, to see novelties actually in growth, he can only make his selection from shows and descriptions.

The rose would particularly need a test-garden wherein would be grown a few plants of every new variety, so that all who seek after rose novelties can gain some real knowledge about them. There let the new roses—and the old ones too—be tested, if possible, under varying conditions, on different stocks, and let no gold medal be awarded until a rose has really merited it after a two or three years' trial.

France has a test-garden at Bagatelle, Paris, and in the United States several such gardens have been founded during recent years; but England has yet nothing of the kind.

Capt. George C. Thomas, Jr., of Chestnut Hill, Philadelphia, Pa., has originated quite a unique scheme of scoring points for no less than thirteen qualifications of a new rose, viz., novelty, color, fragrance, lasting, shape, substance, petalage, size, blooming, hardiness, foliage, growth, and stem. If every new rose, when submitted to such a critical standard test, could secure a goodly percentage of points, it would undoubtedly also win every award possible. One can but hope that the day is not far distant when a test-garden will be founded in Europe, working, if possible, in unison with the test-gardens in the United States and France, so that reports can be exchanged; and the would-be purchasers of new roses will have far more first-hand practical guidance than they can ever gain by inspecting blooms at shows and studying rose literature.

The greatest array of new roses this season was at the National Rose Society's Summer Show, although two of the great Irish raisers, Messrs. McGredy and Hugh Dickson, were, unfortunately, unable to send exhibits, the former firm owing

to frosty weather in June, which completely crippled their plants—a stroke of real bad luck.

Two Gold Medals were awarded, at this show, to:

Mrs. C. V. Haworth, H.T. (Alex. Dickson & Sons.) This is, undoubtedly, a beautiful novelty, of good shape, apricot to buff in color, with reflex of petals shading off to cerise. It looks like a thoroughly free-flowering variety and shows promise of being a real garden rose.

Miriam, H.T. (Rev. J. H. Pemberton.) A bright, new-colored rose, described as “capucine,” i. e., nasturtium. The flowers are globular, but the growth of the plant cannot be described, as no specimen was to be seen on the staging. It should make a fine bedding rose, but would hardly come up to the standard for an exhibitor’s box.

Mr. Walter Easlea, of Eastwood, Leigh-on-Sea, staged, amongst others, the following novelties:

Countess of Warwick, H.T. A lovely rose which merited a high award at the hands of the judges, but apparently did not appeal to them. The color is rich yellow, edged with pink. It should make a good exhibition rose, as the flowers are large, regular in form, and carried erect, not drooping. The raiser also claims that it is a fine rose for massing.

Lulu, H.T. This is said to hold the record for the longest bud yet produced. It seems thin, not unlike Mrs. Alfred Tate, therefore not much of a novelty, whilst the foliage showed mildew.

Glowworm, Per. A single rose of curious and bright coloring, not unlike *R. Moyesii* but slightly more scarlet, suffused with orange; very fragrant and altogether a novelty. Unfortunately, no plant was exhibited on the staging, so there was no means of judging the growth, but, according to the raiser, it is erect, vigorous, and a perpetual bloomer.

Messrs. Bees, Ltd., of Cheshire, showed the following:

Independence Day, Per. Quite a good exhibit, of rich orange color, and said to be a cross between Mme. Edouard Herriot and Souv. de Gustave Prat, with very vigorous growth and beautiful foliage. It should make a fine budding and buttonhole rose. At the Autumn Show of the National Rose Society this rose was again well shown and received a Gold Medal—the highest honor.

Evelyn Thornton, D. Poly. Pretty clusters of bloom, not unlike Trier, but somewhat brighter. Very promising and free-flowering.

Messrs. Chaplin Bros., Ltd., of Waltham Cross, showed:

Edith Cavell, H.T. A large white rose, probably most useful for exhibition purposes. Good growth, but poor foliage, and the blooms look as if they would split.

In addition to Mrs. C. V. Haworth, Messrs. Alex. Dickson & Sons, Ltd., showed:

Hawlmark Scarlet, H.T., and *Hawlmark Crimson*, H.T. The blooms of these two varieties, although of vivid coloring, were hardly up to the usual high standard we look for from this great firm.

Messrs. B. R. Cant & Sons, of Colchester, showed:

Padre, H.T. This should be well worth trying. Growth appeared to be very similar to that of Lady Pirrie, and the color of bloom also, though, if anything, it seemed slightly darker.

Although now not actually new roses, several fine exhibits were seen this year of the following introductions of Alex. Dickson & Sons:

K. of K., which soon proved itself worthy of the Gold Medal awarded to it two years ago.

Colonel Oswald Fitzgerald was also much better shown this year than last—perhaps the season suited it better.

Irish Afterglow. A very fine basket of this was also staged, and attracted a good deal of attention.

At the National Rose Society's Provincial Show, held at Norwich, four Gold Medals were awarded, of which no less than three were won by Messrs. S. McGredy & Son, of Portadown, Ireland, for their new seedlings, as follows:

Mrs. H. R. Darlington, H.T. A distinct advance on the well-known Tea rose, *Mrs. Foley-Hobbs*; a better doer, which holds its head well up. The blooms are exceptionally large—one actually measured eight inches across and was perfectly formed.

Mrs. Henry Morse, H.T. A rose that attracts the eye at a glance, the coloring being a combination of that of *Mme. Abel Chatenay* and *Lady Pirrie*. The bud is long and opens freely. A good all-round rose, and every bloom comes good in form.

Mrs. Charles Lamplough, H.T. This rose will be sought after by the keen exhibitor. It is a large, lemon-yellow sort of great substance and grows rigidly upright. If exhibitors succeed in growing it as well as its raiser, it should supersede the light-colored roses of similar class in exhibitors' boxes.

The fourth Gold Medal was awarded to Messrs. Alex. Dickson & Sons, for the following:

Clara Curtis, H.T. A striking yellow rose resembling the famous and hitherto unrivaled *Marechal Niel*. It is beautiful in form and color, slightly tea-scented, and, in fact, quite a novelty.

They were also awarded a Certificate of Merit for:

Captain F. Bald, H.T. Crimson color; large, well-formed flowers; a promising exhibitor's rose.

Mrs. Arthur Johnson, H.T. (S. McGredy & Son.) Also a promising yellow rose, shading to orange; but are we not overdoing it with these yellow roses? It almost points to some of them soon being bracketed as synonymous or too-much-alike varieties.

At the Autumn Show of the National Rose Society, Messrs. S. McGredy & Son received a Gold Medal for:

Irene Thompson, H.T. Another orange-yellow of good form and firm foliage. Not unlike *Marquise de Sinety*, but much superior—very free and every flower comes good. It should be a splendid decorative and bedding variety, and a perpetual bloomer.

The same firm also showed:

Martha Drew, H.T. An improvement on Mrs. Theodore Roosevelt, which it resembles, though the blooms are larger and not inclined to flatness. It should make a good garden and exhibition rose.

Edel, H.T. A fine, promising exhibitor's rose of Florence Forrester type. It is, perhaps, rather too heavy for an ordinary bedding variety, but has the good qualification of fragrance. It well deserved an award, which the judges did not think fit to give it, but perhaps the blooms shown did not like the inclement weather, or traveling upset them.

At this show the following roses were also well shown by Messrs. S. McGredy & Son:

The Queen Alexandra Rose, H.T. Its intense vermilion, shaded old-gold coloring, made a brilliant attraction.

Golden Emblem, H.T. Rich yellow blooms—an improved Rayon d'Or.

At the Test-Garden at Bagatelle, Paris, the Gold Medal of the year was awarded to *Jean C. N. Forestier*, a Pernetiana rose of vigorous growth, scented, and not unlike Mme. Edouard Herriot.

There are some good entries for next year's judgment, and although we have not yet settled down to the "piping times of peace," there seems every indication of a reawakening interest in the rose-world, for undoubtedly no better hobby could be sought as a solace and relaxation after the horrors which the world passed through during the five years of war.

The Bagatelle New Rose Trials

Translated by M^{lle}. THERESE TURBAT, Orleans, France

EDITOR'S NOTE.—It is because of the definite desire of the members of the American Rose Society, as expressed in cards to the Editor, that much attention is this year paid to the new varieties of roses, both domestic and foreign. This interesting account of the trials at the wonderful Bagatelle Rose-Gardens near Paris was written by the Director of the Gardens, for the French journal, *Les Amis des Roses*, and kindly translated for us by M^{lle}. Therese Turbat, daughter of the noted French rosarian, Monsieur E. Turbat, of Orleans, France.

THE meeting of the New Rose Trial Jury was held at Bagatelle, on June 18, 1919. As previously, the roses to be tested were received either in the autumn of 1917 or the spring of 1918, at a time of deep inquietude and big difficulties, so you must not be surprised if this show is in quantity smaller than the previous years.

The new rose varieties sent this spring by French and foreign nurserymen, which will be judged next year, are much more numerous. However, the trial seems to excite the same interest as previously, in spite of the great difficulties of transportation and entry into France.

Twenty new rose varieties were received in the spring of 1918, including twelve from England, four from Orleans, four from Lyons.

The Gold Medal was obtained by M. Pernet-Ducher, for the variety *Jean C. N. Forestier*. He also showed another rose, *Mrs. Farmer*.

Jean C. N. Forestier, Per. Strong shrub, healthy and vigorous. The bud, of elegant shape, is of a lovely bright pink, slightly tinged with yellow; when the flower opens it is half-double, of a delicate shape, bright red and yellow, deeper at the aiglet, with very bright green foliage; it has a penetrating perfume.

Mrs. Farmer, Per. Vigorous shrub, with bronze-green foliage; large flower, not full; Indian-yellow color, reverse of petals reddish apricot, being a contrast of a very seductive effect.

The First Certificate was obtained by *Argyll*, H.T. (Dobbie & Co.). It is a big white rose, a cross of Mme. Caroline Testout and Marquise de Sinety. It seems to be very perpetual.

The other two Certificates were awarded to:

Mme. Raymond Chevalier Appert, H.T. (Guillot.) Strong and very floriferous, with dark green foliage; nice elongated buds; flowers big, full, cup-shaped, of a bright ashy red color. It is a hybrid of General MacArthur and Richmond.

K. of K. An improvement on Red-Letter Day, mentioned in last year's competition. It is just the same bright crimson, but instead of being single, as is Red-Letter Day, it is half-double, with large petals. Seems to be extremely floriferous, as are all other roses mentioned in this competition. It was originated by Alex. Dickson & Sons.

The firm of Turbat, of Orleans, showed four new roses, three of them Wichuraianas. One was *Fernand Rabier*, with deep scarlet-red flowers. A dwarf Polyantha, very floriferous, strong, blooming in large corymbs of small, coral-red flowers, is *Suzanne Turbat*, which flowers late and lasts until frost.

A new and interesting rose, *Mme. Andre Schwartz*, was exhibited by M. Andre Schwartz, of Lyon. It has yellow flowers and bright green foliage. *Auguste Gervaise* (Barbier & Co.) is the result of crossing a climbing Wichuraiana with Le Progres. It is half-double and very big for a Wichuraiana Hybrid, with very numerous flowers; climbing; vigorous. The bloom is yel-

low, turning slightly to a copper color, and then yellow and bright pink, and at last white. This very interesting variety has obtained the Certificate for the best decorative rose.

The firm of Laxton Bros. showed five new varieties, which, having suffered from a long and very difficult journey, can only be examined next year. The variety *A. F.*, a cross of Mme. Abel Chatenay and Richmond, is a vigorous and very floriferous variety with a bright pink flower. The flowers of one of the other varieties, *Jessie*, are large, a Mayflower-pink, and the shrub is vigorous and perpetual. *Mrs. J. Searl*, from Alex. Dickson & Sons, was remarkable.

The members of the Jury took the opportunity to examine attentively the very numerous new varieties received last spring, which will be examined definitely next year.

They admired *La France Victorieuse* (P. Guillot), a lovely Hybrid Tea which has very large, tender pink flowers.

Several varieties from Alex. Dickson & Sons, among which, like Irish Afterglow, you find a tendency to large, single flowers of a singular ivory and apricot-pink color; very elegant, but passing very quickly with the sun.

M. Pernet-Ducher has a very nice Pernetiana, with a large pure yellow flower, in *Souvenir de Claudius Pernet*. It is a Rayon d'Or with an elongated bud, long stems, and a large, full flower. He had also a superb new orange-yellow rose, *Benedicte Seguin*, a very vigorous plant with bronzy green foliage and an abundance of flowers.

The most important Dutch nurseryman, M. Leenders & Co., has sent, in spite of the transportation difficulties, five new varieties. One of them, *Mme. Annette Aynard*, seems very interesting. It has big buds with large, yellow-ivory petals, bordered with pink; rigid peduncle; very full flowers; fleshy petals. You can compare it to Mme. Constant Soupert, as the petals, bordered with pink, were slightly yellow, which gives it quite a new grace.

Dobbie & Co. have also sent a new yellow-flowered rose in *Golden Pirrie*, a sport of Lady Pirrie.

The rose-growers present looked with interest at a new hybrid from *Rosa bracteata* and a Tea rose, obtained by W. Paul & Son, named *Mermaid*, having large flowers, single and yellow.

This new and rare hybridization may be the beginning of a new variety which will perhaps be robust under our climate.

Three new varieties from Howard & Smith, of Los Angeles, Calif., crossed the Atlantic. They had orange and yellow flowers on very robust plants. There will be an interesting rivalry between those two friends, Pernet and Howard.

It is very difficult to give an opinion on roses just in place and which had endured all the traveling difficulties, so hard at the present moment.

The varieties being tested in the 1919-20 trial are 60: There are sorts from nurserymen of the following nationalities—10 French, 7 English, 2 Dutch, 1 American, 1 Danish.

The New "Hill" Roses

By THE EDITOR

LATE letters from E. G. Hill and from his capable son, Joseph H. Hill, give most interesting news concerning the important productions that come from Richmond, Ind. Mr. E. G. Hill writes as follows:

"I know that it is not excuses nor explanations that you want, but a little report for the Annual of the outlook for the coming year in new roses; namely, What is on the horizon here at Richmond?

"Of the E. G. Hill Company's notable 'set' of which Columbia and Rose Premier are members, another seedling, named *Golden Rule*, will rank among good yellows, and will be introduced by the E. G. Hill Company and the Joseph H. Hill Company jointly. This is already in demand in the market where the 'tops' have been sold, as it is a durable, free, handsome, commercial rose.

"A seedling of 1918 at the E. G. Hill Company's place is a 'fancy' yellow, called *Citronelle*—a cross of Sunburst and an unnamed seedling. It is citron-yellow with blush shadings, heavy texture and dark foliage. It will be given a careful try-out the coming season.

"A large number of seedlings, sown some ten weeks ago, are up in beautiful shape, probably the best lot of little plants ever germinated by this firm, all of which *may* prove single—or worthless—you never can tell! But they are good-looking little fellows and of very choice parentage.

"At the Joseph H. Hill place, there is a crimson-scarlet sport of Columbia, already offered for registration as *Red Columbia*. There is no doubt that this is one of the coming American roses for forcing. It has all the good qualities of the parent in habit and health, with lovely dark foliage, and a fine flower of velvety crimson-scarlet.

"Fred Lemon has also been using the camel's-hair brush to good purpose, and has secured a white rose of good commercial promise; it has both Ophelia and Columbia blood in its cross, and is a substantial flower, opening from a

nicely pointed bud; has plenty of petals and is white, with light lemon shadings—a color badly needed.

“Besides these novelties of the three firms, E. G. Hill, as usual, has a goodly number of imported novelties on trial—all of them a pure ‘gamble’ from the American florists’ point of view, but a source of great pleasure to the grower, as he watches their development in America’s free air.”

Concerning Red Columbia, Joseph H. Hill says:

“We think we have a wonderful red rose. The color has a little more scarlet in it than Hoosier Beauty. The bud is long and pointed, and the guard petals, unlike those of Columbia, are long and encase the bud perfectly. The foliage comes up well to the flowers, the long neck of Columbia being absent, though both the style of growth and the foliage, with this exception, are identical with Columbi.

“This rose appeared on our place last year, and at that time a few of the petals were flecked with white. We propagated from this plant, and this year we had one plant come through with a solid red flower, following with other flowers, all of them identical.”

New Rose Introductions

GREAT BRITAIN

A. F., H.T. (Laxton Bros., 1920.) Mme. Abel Chatenay × Richmond. Flowers bright pink. Very vigorous grower; abundant bloomer.

Argyll, H.T. (Dobbie & Co., 19—.) Mme. Caroline Testout × Marquise de Sinety. Buds and flowers large, pure white. Seems to be perpetual. Certificate No. 1, Bagatelle, 1918.

**Captain F. Bald*, H.T. (A. Dickson & Sons, 1919.) Bud large, globular; flower large, very double, globular, borne singly on good stem; lasting; delicate fragrance. Color velvety black, sheened scarlet-crimson. Foliage abundant, large, wrinkled, rich green. A vigorous grower of upright, bushy habit, producing an abundance of blooms. Very hardy. Certificate of Merit, N. R. S., Provincial Show, Norwich, 1919.

Charles K. Douglas, H.T. (Hugh Dickson, 1919.) Bud large, long-pointed; flower large, full, double; sweet fragrance. Color intense flaming scarlet, flushed bright velvety crimson. Foliage dark green; disease resistant. Vigorous, upright grower; produces an abundance of blooms from June to October.

Clara Curtis, H.T. (A. Dickson & Sons, 1920.) Type, Marechal Niel. A striking yellow rose of beautiful form and color, slightly tea-scented. Gold Medal, N. R. S., Provincial Show, Norwich, 1919.

**Climbing Chateau de Clos Vougeot*, Cl. H.T. (H. Morse, 1920.) Sport of Chateau de Clos Vougeot. Bud very large; flower very large, full, open form, very double, borne singly and several together on long stems; very lasting; strong fragrance. Color same as parent but better shaped flower. Foliage abundant, medium size, leathery, rich green; disease resistant. Very vigorous and free blooming, producing its blooms from June to September. Very hardy.

Climbing H. V. Machin, Cl. H.T. (Hugh Dickson, 1919.) Sport of H. V. Machin. Bud large; flower large, full, double. Color deep scarlet, shaded crimson. Vigorous grower; profuse bloomer.

*All varieties starred are described from data supplied by originators on American Rose Society's Official Record Cards (see page 112).

Coralie, H.W. (W. Paul & Son, 1919.) Flower large for its class, double; very lasting. Color coral-red, changing to deep pink. Foliage glossy green. Climber.

Countess of Lonsdale, H.T. (Hugh Dickson, 1919.) Bud medium size; flower medium size, full, double; strong, sweet fragrance. Color deep cadmium-yellow. Foliage, young growth deep, bronzy red. Vigorous grower of bushy habit; free bloomer.

Countess of Warwick, H.T. (W. Easlea, 1919.) Flowers large, regular in form, carried erect on good stems. Color lemon-yellow, edged with pink. Vigorous upright grower. Certificate of Merit, N. R. S., 1919.

Covent Garden, H.T. (B. R. Cant & Sons, 1919.) Flower well formed, on long, strong stems. Color rich, deep crimson, with plum-black flushes on reverse of petals. Foliage leathery, glossy green; disease resistant. Vigorous, upright grower, blooming continuously from June to October. Gold Medal, N. R. S., 1918.

Duchess of Abercorn, H.T. (Hugh Dickson, 1919.) Flowers beautifully formed, large, full, double. Color creamy white, flushed and tinted bright rose at edges of petals. Vigorous, upright grower of branching habit; free and continuous bloomer from June to October.

Edel, H.T. (McGredy & Son, 1919.) Type, Florence Forrester. Bud very large; flower very large, double, well built, stately, opens well in all weathers; sweet fragrance. Color white, with the faintest ivory shading toward base, passing to pure white. Foliage bold and distinct. Very vigorous grower; free bloomer. Certificate of Merit, N. R. S., 1917.

Edith Cavell, H.T. (Chaplin Bros., 1918.) Type, Duchess of Portland. Bud long-pointed; flower double, high center, well shaped, borne singly on long, strong stem. Color pale lemon-white. Vigorous, upright grower. Certificate of Merit, N. R. S.

E. Godfrey Brown, H.T. (Hugh Dickson, 1919.) Bud very large; flower very large, full, high center, very double, borne on long, strong stem; very lasting; strong, sweet fragrance. Foliage stout and clean. Color deep reddish crimson of even shade which is very lasting. Vigorous, upright grower.

**Evelyn Thornton*, Poly. (Bees, Ltd., 1919.) Leonie Lamesch \times Mrs. W. H. Cutbush. Bud medium size; flower medium size, full, double, open form, borne in clusters on medium-length stems; very lasting; fragrant. Color shell-pink, deepening to salmon and lemon with orange shading. Foliage abundant, large, leathery, glossy, dark, bronzy green; disease resistant. Vigorous grower of bushy habit; blooms profusely all season. Award of Merit, N. R. S., 1919.

**Evening Star*, Per. (H. Morse, 1919.) Sport of Mme. Edouard Herriot. Type, same as parent. Bud medium size; flower large, full, globular, double, borne several together, on average-length stems; lasting; slight fragrance. Color golden yellow, shaded apricot. Foliage abundant, large, glossy light green; disease resistant. Vigorous climber of bushy habit; profuse and continuous bloomer. Very hardy.

Exquisite, H.T. (Therkildsen, 1919.) Long-pointed flower, with outer petals reflexing. Color creamy yellow, flushed with rose. Growth vigorous, upright; free-flowering; almost mildew-proof.

Glowworm, Per. (W. Easlea, 1919.) Flower semi-single, with moderate fragrance. Color rich scarlet-red, suffused coppery orange; often as brilliant as the Austrian Copper Briar. Vigorous, upright grower; abundant, continuous bloomer.

Golden Glow, Per. (Chaplin Bros., 1918.) Sport of Mme. Edouard Herriot. Bud long-pointed; flower full, double, high center. Color apricot, shaded bronzy orange. Foliage dark green.

**Independence Day*, H.T. (Bees, Ltd., 1919.) Mme. Edouard Herriot × Souv. de Gustave Prat. Bud medium size, long-pointed; flower medium size, globular, double, high center, borne, several together, on long, strong stem; very lasting; strong fragrance. Color sunflower-gold, stained with flame-color, overlying orange-apricot, all of which tints are fused together in the mature bloom. Foliage abundant, medium size, leathery, glossy, dark green; disease resistant. A vigorous, upright grower, reaching a height of 2 to 2½ feet; free and continuous bloomer from June to October. Award of Merit and Gold Medal, N. R. S., 1919.

Joan, H.T. (J. H. Pemberton, 1919.) Bud peach-color; flower small, semi-single, borne in erect clusters, copper-color. Foliage small, glossy, dark green; disease resistant. Dwarf, compact grower.

John Davison, H.T. (McGredy & Son, 1919.) Bud long-pointed; flower large, full, double, high center, perfect form; sweet fragrance. Color deep rich crimson, shaded velvety crimson—very lasting. Good habit of growth; continuous bloomer. Gold Medal, Irish Rose and Floral Society.

**Kathleen Harrop*, Bour. (A. Dickson & Sons, 1919.) Sport of Zephirine Drouhin. Bud large; flower large, semi-double; moderate fragrance. Color soft, pale shell-pink. In all other respects like Zephirine Drouhin.

Kew Beauty, H.T. (Therkildsen, 1919.) Bud medium size; flower medium size, crimson, paling to whitish yellow at base of petals. Branching habit; profuse bloomer.

Lady Beatty, H.T. (Chaplin Bros., 1918.) Type, Dr. Joseph Drew. Large, well-formed flowers with sweet fragrance. Color soft pink on a creamy white ground, the pink shading varying greatly in the petal. It shades from the margin inward, the center of the flower, when first open being a rich coral-orange. A vigorous grower. Certificate of Merit, N. R. S., 1918.

**Lady Dickson*, H.T. (A. Dickson & Sons, 1919.) Type, Ophelia. Bud large, globular; flower large, globular, high center, semi-double, borne on good stem; strong fragrance. Color rich apricot, flushed salmon-pink. Foliage abundant, rich green, disease resistant. Vigorous, upright, bushy grower; profuse bloomer from June to October. Very hardy.

Lady Gwendoline Colvin, Cl. H.T. (Chaplin Bros., 1918.) Type, Lady Pirrie. Bud long-pointed; flower beautifully reflexed, high center; tea fragrance. Color apricot-salmon, shaded chrome-yellow, the outer petals stained a beautiful carmine. A vigorous grower of climbing habit, making shoots 6 to 10 feet long in a season.

Lord Kitchener, H.T. (Chaplin Bros., 1918.) Bud long-pointed; flower full, double, high center; strong fragrance. Color bright carmine-rose. Vigorous grower of bushy, compact habit. Certificate of Merit, N. R. S.

Louise Baldwin, H.T. (McGredy & Son, 1919.) Type, Lady Hillingdon. Bud long-pointed; flower full, high center; strong, sweet fragrance. Color rich orange, with soft apricot shading over the entire petal. Vigorous grower; abundant bloomer. Certificate of Merit, N. R. S., 1917.

Lulu, H.T. (W. Easlea, 1919.) Bud very long-pointed; flower orange, salmon, and pink. Vigorous grower of bushy habit, producing an abundance of bloom all season.

**Miriam*, H.T. (Pemberton, 1919.) Flower large, cupped, high center, globular, double, borne, several together, on average-length stems; very lasting; slight fragrance. Color nasturtium-yellow. Foliage sufficient, glossy green, medium size. Vigorous grower of upright habit, bearing an abundance of blooms from June to September. Very hardy. Gold Medal, N. R. S., 1919.

Mrs. A. W. Atkinson, H.T. (Chaplin Bros., 1918.) Bud large, long-pointed;

flower large, full, high center. Color ivory-white. Foliage good. A vigorous grower of upright habit. Certificate of Merit, N. R. S.

Mrs. Chaplin, H.T. (Chaplin Bros., 1918.) Bud very large; flower very large, borne on long, strong stems; lasting. Color creamy pink, shaded yellow toward the base. Opens well in all weathers.

Mrs. Curnock Sawday, H.T. (Elisha J. Hicks, 1920.) Seedling of unnamed parents. Type, Mrs. George Shawyer. Bud large, long-pointed; flower large, full, high center, double, borne, several together, on long stems; very lasting; slight fragrance. Color satin pink; foliage abundant, glossy bronze-green, large; mildews. Vigorous, bushy grower; free and continuous bloomer from June to October.

**Mrs. C. V. Haworth*, H.T. (A. Dickson & Sons, 1919.) Bud very large, long-pointed; flower very large, open form, semi-double, borne, several together, on strong stems; very lasting; strong fragrance. Color cinnamon apricot, passing to delicate biscuit-buff, with very delicate cerise-rose sheen on reflex of petals, deeply zoned saffron-primrose, the magnolia-like guard petals flamed rose. Foliage abundant, large, leathery, glossy dark green. Growth very vigorous, upright, bushy, bearing a profusion of bloom from June to October. Very hardy. Card of Commendation, N. R. S., 1918.

**Mrs. C. W. Dunbar-Buller*, H.T. (A. Dickson & Sons, 1919.) Type, Earl of Warwick. Bud very large, globular; flower very large, full, borne on long, strong stems; strong fragrance. Color rosy white, veined warm, clear rosy deep carmine, with lemon base, colorings which betoken a pure and lasting shade—rose-madder—throughout the bloom's existence; reflex of petal solid rosy cerise, edges silvery white when fully open. Foliage abundant, large, leathery, dark green. A vigorous, upright, bushy grower and continuous bloomer from June to October. Very hardy.

Mrs. Edith Stanley, H.T. (W. Easlea, 1919.) Exquisitely shaped blooms of creamy white, richly shaded Indian yellow. Vigorous grower; abundant bloomer.

Mrs. Elisha Hicks, H.T. (Elisha J. Hicks, 1919.) Frau Karl Druschki \times Mme. Gabriel Luizet. Type, Killarney, but more double. Bud very large, long-pointed; flower very large, full, high center, very double, borne singly on medium long stems; very lasting; very strong fragrance. Color flesh, nearly white. Foliage abundant, wrinkled, light green, large; disease resistant. Moderate grower of dwarf habit, reaching a height of 2 feet; profuse and continuous bloomer from June to October.

Mrs. Henry Morse, H.T. (McGredy & Son, 1919.) Bud very large, long-pointed; flower very large, high center, double; fragrant. Color flesh-cream ground, with a sheen of bright rose, deeply impregnated and washed vermilion, with clear vermilion veining on petals. Very vigorous grower, bearing an abundance of bloom. Gold Medal, N. R. S., 1919.

Mrs. Ramon de Escofet, Per. (W. Easlea, 1919.) Type, George C. Waud. Bud very large; flower very large, intense flame-crimson. Vigorous grower; continuous bloomer.

Mrs. Redford, H.T. (McGredy & Son, 1919.) Type, A. K. Williams. Flower full, of perfect shape; petals gracefully reflexed; opens freely in all weathers; sweet fragrance. Color bright apricot-orange. Foliage leathery, glossy; disease resistant. Vigorous, upright grower; abundant bloomer. Gold Medal, N. R. S.

Prosperity, H.Musk. (Pemberton, 1919.) Flowers rosette form, borne in extra-large, erect trusses; very lasting. Color white, tinted pink in bud. Foliage dark green, glossy; disease resistant. Vigorous, bushy grower, reaching a height of 3 to 4 feet; free bloomer, bearing its flowers all season and into November.

Romeo, H.W. (W. Easlea, 1919.) Type, miniature Liberty. Flowers perfectly formed, double, deep red. Vigorous grower; blooms continuously during June and July.

Romeo, H.T. (Therkildsen, 1919.) Seedling of (Edith Part × Ophelia). Type, Mrs. Aaron Ward. Flowers Indian yellow, suffused coppery pink. Foliage almost disease resistant. Upright grower; free bloomer.

**Rosalie Walker*, H.T. (F. Cant & Co., 1920.) Result of crossing unnamed seedlings. Bud large, long-pointed; flower large, full, cupped, high center, double, borne, several together, on long, strong stems; firm, velvety petals; very lasting; strong fragrance. Color crimson-scarlet. Foliage abundant, medium size, glossy dark green; disease resistant. A vigorous grower of upright, bushy, open habit, reaching a height of 3 feet and blooming abundantly from June to October. Certificate of Merit, N. R. S.

Sea Foam, H.Brac. (W. Paul & Son, 1919.) Flowers double, milk-white. Foliage glossy dark green. Blooms continuously from June to October. Quite hardy. Award of Merit, R. H. S.

Star of Persia, *Rosa lutea* hybrid. (Pemberton, 1919.) Flower large (3 inches in diameter), semi-single. Color bright yellow, with golden stamens. Grows to a height of 8 to 10 feet; blooms latter part of May and beginning of June, and intermittently during the summer. A good pillar rose.

Sunshine, H.T. (Chaplin Bros., 1918.) Bud long-pointed; flower double, full, high center; sweet fragrance. Color golden yellow, shaded apricot.

The Dowager Countess of Roden, H.T. (W. Paul & Son, 1919.) Bud large; flower large, full, bright silvery pink. Profuse bloomer.

Toreador, H.T. (W. Paul & Son, 1919.) Bud crimson; flower semi-double, rosy red, outside of petals golden yellow. Vigorous grower; abundant bloomer.

White Star, H.T. (Morse, 1920.) Sport of Ophelia. Bud large; flower large, full, cupped, double, borne singly on average-length stem; very lasting; strong fragrance. Color ivory-white, shaded lemon-yellow. Foliage sufficient, large, leathery, dark green, disease resistant. A vigorous grower of upright, bushy habit, reaching a height of 2½ feet, and producing an abundance of blooms continuously from June to October. Very hardy.

FRANCE

**Aspirant Marcel Rouyer*, H.T. (Pernet-Ducher, 1919.) Sunburst × unnamed variety. Bud large, long-pointed; flower very large, full, double, borne singly on strong stem; fragrant. Color deep apricot, reddish apricot at center, tinted salmon-flesh on outer petals, veined deep yellow at base. Foliage abundant, large, glossy bronze-green. Very vigorous, upright grower, producing an abundance of flowers throughout the season.

**Beaute Orleanaise*, H.Wich. (Turbat & Co., 1919.) Seedling from unnamed variety. Bud medium-size, ovoid; flower medium size, full, very double, borne in clusters of 20 to 25, on long stems; slight fragrance. Color pure white, slightly suffused rosy salmon, passing to fleshy rose. Foliage abundant, medium size, glossy green; disease resistant. A very strong grower of climbing, upright habit, blooming profusely during June and July. Very hardy.

**Capitaine Georges Dessirier*, H.T. (Pernet-Ducher, 1919.) Unnamed variety × Chateau de Clos Vougeot. Bud large, globular; flower large, full, double, globular, borne singly on long, strong stem; very lasting; strong fragrance. Color dark velvety red, shaded with crimson and fiery red. Foliage abundant, large, glossy, dark green. Very vigorous grower of bushy habit and an abundant and continuous bloomer. Hardy.

**Comtesse de Cassagne*, H.T. (M. Guillot, 1919.) Result of crossing unnamed varieties. Bud very large, long-pointed; flower very large, globular, very double, borne, several together, on long stems; very lasting; strong fragrance. Color coppery rose, shaded with bright rose—varies, sometimes being entirely yellow. Foliage abundant, large, light green; disease resistant. Very vigorous grower of bushy habit and bears a profusion of blooms all season.

General Don, H.T. (Le Cornu, 1919.) Mme. Melanie Soupert × Louise Catherine Breslau. Crushed strawberry ground, overlaid with deep coppery metallic tints.

Grand-Père Lottin, H.W. (Lottin, 1918.) Lady Godiva × Mrs. W. H. Cutbush. The very double flowers are borne in clusters and in color are a salmony flesh-pink, which becomes brighter in the center. It is of climbing habit, with good foliage and bears an abundance of blooms.

**Indefectible*, D.Poly. (Turbat & Co., 1919.) Sport of seedling from *Ænnchen Müller*. Buds medium size, long-pointed; flowers medium size, cupped, semi-double, borne in clusters of 15 to 20 on long stems; very lasting; slight fragrance. Color bright, clear red. Foliage abundant, medium size, bronzy green; disease resistant. A very vigorous grower of bushy habit, reaching a height of 2 to 3 feet, and blooming continuously the whole season.

**Jean C. N. Forestier*, Per. (Pernet-Ducher, 1919.) Unnamed variety × Mme. Edouard Herriot. Bud large, ovoid, Lincoln red; flower very large, full, double, borne singly on long, strong stems; very lasting; fragrant. Color carmine-lake, slightly tinted with Chinese orange and yellow. Foliage abundant, large, glossy bronze-green; disease resistant. A very vigorous, upright grower bearing a profusion of blooms from June till October. Gold Medal, Bagatelle, 1919.

**La France Victorieuse*, H.T. (Gravereaux; intro. by Guillot, 1919.) Result of crossing unnamed seedlings. Bud very large, long-pointed; flower very large, cupped, very double, borne singly on long stem; very lasting; fragrant. Color silvery carmine-pink, tinted with yellow on inside. Foliage sufficient, dark green, large; disease resistant. Very vigorous, upright grower; bears an abundance of blooms intermittently during the season.

Lolette-Dupain, Mult. (Lottin, 1918.) Casimir Moule × Mme. Norbert Levavasseur. The double flowers are borne in clusters on long, strong stems. Color yellowish rose, with reverse of petals silvery rose. Foliage leathery green. A vigorous grower of upright habit. Blooms a second time in autumn.

**Maréchal Foch*, Poly. (Levavasseur & Co., 1918.) Sport of Orleans Rose. Bud medium size; flower medium size, open form, semi-double, borne in clusters on medium-length stems; very lasting; strong fragrance. Color deep red.

**Mme. Emile Thierrard*, H.T. (Turbat & Co., 1919.) Seedling of (Mrs. Aaron Ward × Joseph Hill). Bud very large, ovoid; flower very large, full, double, borne singly on long stem; very lasting; fragrant. Color chamois-yellow and pink; aiglets pure yellow. Foliage abundant, large, normal green; disease resistant. Vigorous grower of upright habit, reaching a height of 2 feet, and bearing an abundance of bloom from May to October. Hardy.

Mme. E. Rocque, Mult. (Lottin, 1918.) Veilchenblau × Reine des Violettes. Flowers very double, in clusters, on long, strong stems; lasting. Color violet-blue, sometimes striated with white, passing to amethyst-blue on opening. Foliage light green, glossy. Vigorous, upright grower.

**Mme. Raymond Chevalier-Appert*, H.T. (Guillot, 1917.) Gen. MacArthur × Richmond. Bud very large, long-pointed, very bright cerise-red, shaded crimson; flower very large, cupped, double, borne, several together, on long, strong stem; very lasting; strong fragrance. Color brilliant cerise-red, shading lighter at edges of petals. Foliage abundant, large, dark green, wrinkled; disease

resistant. Vigorous grower of bushy habit, with an abundance of blooms all season. Certificate of Bagatelle, 1919.

Sir Walter Raleigh, H.T. (Le Cornu, 1919.) A free-blooming rose of the same color as Lady Pirrie, but with the reverse of the petals deep crimson. Fine autumn bloomer, often bearing 12 blooms to a spike. Stems and foliage deep bronze-red.

**Souv. de Claudius Pernet*, Per. (Pernet-Ducher, 1920.) Constance \times unnamed variety. Bud large, long-pointed; flower very large, full, double, borne singly on long, strong stem; very lasting; fragrant. Color pure sunflower-yellow, deeper in center. Foliage abundant, glossy green, large; disease resistant. Very vigorous, upright grower, producing an abundance of blooms from May to October. Hardy.

**Souv. de George Beckwith*, Per. (Pernet-Ducher, 1919.) Unnamed variety \times Lyon Rose. Bud very large, long-pointed, shrimp-pink, tinted orange-yellow; flower very large, full, very double, globular, borne singly on long, strong stem; very lasting; fragrant. Color shrimp-pink, tinted chrome-yellow, with deeper yellow at base of petals. Foliage abundant, large, glossy bronze-green. Very vigorous grower of upright habit and a continuous and abundant bloomer. Hardy.

Souv. du Sénateur Bazire, H.W. (Lottin, 1918.) Veilchenblau \times Bordeaux. Flowers semi-double, in clusters of 25 to 50. Color violet, passing to violet-rose at the center; stamens white; pistils yellow.

**Susanne Turbat*, D.Poly. (Turbat & Co., 1919.) Seedling of (Petit Constant \times unnamed seedling). Bud medium size, ovoid; flower medium size, cupped, globular, double, borne, in clusters of 10 to 20, on medium-long stems; very lasting; slight fragrance. Color coral-red, shaded bright shrimp-pink. Foliage abundant, medium size, glossy bronze-green; disease resistant. Vigorous, bushy, dwarf grower, reaching a height of 1½ feet, bearing a profusion of blooms from May to October. Hardy.

UNITED STATES AND CANADA

Bloomfield Abundance, H.T. (Capt. George C. Thomas, 1920.) Sylvia \times Dorothy Page-Roberts. Type, Cecile Brunner. Flowers double, salmon-pink, produced singly and in sprays. Foliage glossy, dark green, not susceptible to mildew. Grows 3 to 6 feet high, bushy. Similar to Cecile Brunner, but is hardier and the blooms are larger.

Bloomfield Perpetual, H.P. (Capt. George C. Thomas, 1920.) Iceberg \times Frau Karl Druschki. Flower white, single; lasting. Foliage good. Grows 3 to 5 feet high, bushy; very free-flowering. Resembles the Cherokee in bloom but differs in habit. Hardy in Philadelphia; blooms until November.

Bloomfield Progress, H.T. (Capt. George C. Thomas, 1920.) Mary, Countess of Ilchester \times General MacArthur. Type, General MacArthur. Flower double (over 50 petals); strong fragrance; very lasting. Color red. Strong-growing, bushy plant. Similar to General MacArthur, but differs in habit, size, and form of flower, being superior in that it holds its center better and is larger in hot weather.

**Cornelia*, H.T. (Robert Scott & Son, 1919.) Ophelia \times Mrs. Aaron Ward. Type, *Souv. de la Malmaison* in bloom. Bud medium size, globular; flower medium size, full, double, borne singly on medium length stem; very lasting; fragrant. Color, outer petals light flesh-pink, with center bright Malmaison pink, base of petals orange. Foliage abundant, light green; disease resistant. Vigorous grower of upright, bushy habit; blooms profusely for five weeks. (Report made from plants grown under glass.)

**Crusader*, H.T. (Montgomery Co.; intro. by A. N. Pierson, 1920.) Bud large, ovoid, opens perfectly; flower large, full, double, borne singly on long, strong stem; very lasting; slight fragrance. Color crimson-red, brighter in center. Foliage abundant, medium size, leathery, rich green; disease resistant. Vigorous, upright grower and free bloomer, bearing its flowers continuously all season.

**Dr. Huey*, H.W. (Capt. George C. Thomas, 1914; intro. by Bobbink & Atkins and A. N. Pierson, 1920.) Ethel \times Gruss an Teplitz. Bud medium size; flower medium size (about 2 inches in diameter), semi-double (15 petals) to single, borne in clusters of 3 or 4 on good stems; lasting. Color dark crimson-maroon of great brilliancy; stamens and anthers light yellow. Foliage medium green; young growth reddish brown. Blooms continuously for three weeks.

Felicity, H.T. (Clarke Bros., 1919.) Ophelia \times Hoosier Beauty. Bud long-pointed; flower large (varies from 52 petals early in season to 61 in September); very fragrant. Color rose-pink, silvery suffusion. Foliage dark green. Upright, strong-branching habit; very free-flowering; produced 155 blooms outdoors.

Frank W. Dunlop, H.T. (J. H. Dunlop, Canada; intro. in U. S. by Charles H. Totty Co., 1920.) Mrs. Charles Russell \times Mrs. George Shawyer. Type, La France. Bud very large, long-pointed; flower very large, full, high center, double (about 45 petals), borne singly on long, strong stems; very lasting; fragrance strong. Color deep, bright rose-pink. Foliage sufficient, leathery, glossy dark green. A vigorous grower of open habit and a profuse bloomer.

**Glorified La France*, H.T. (John Cook, 1916; not yet in commerce.) Frau Karl Druschki \times Mrs. Charles Russell. Type, La France. Bud large to very large, globular; flower very large, full, high center, very double (92 petals), borne singly on long stem; very lasting; slight fragrance. Color silvery pink—deeper than La France. Foliage sufficient, large, soft, light green; mildews. Vigorous, upright grower, reaching a height of 3 feet; moderate and continuous bloomer from June to October. Freezes to 10 inches.

Max Graf, Hyb. (Bowditch, 1919.) Probable hybrid of *R. rugosa* and *R. setigera*. Flower single, bright pink, with golden centers. Foliage glossy green, like *R. rugosa*; attractive all season; disease resistant. Vigorous grower of bushy, climbing habit; profuse bloomer. Rarely produces seed.

**Miss Lolita Armour*, Per. (Howard & Smith, 1919.) Result of a cross of unnamed seedlings. Bud medium size, globular; flower very large, cupped, double, borne, several together, on long stems; very lasting; strong fragrance. Color chrome-yellow at base, shading to burnt orange and copper; reverse of petals chrome-yellow at base, shading to bright salmon, with brilliant copper suffusion; passes to lovely shade of shrimp-pink and copper with age. Foliage abundant, leathery, glossy bronze-green, large. Growth very vigorous, bushy, upright; abundant bloomer. Silver Medal, N. R. S., 1919.

**Mrs. John Cook*, H.T. (John Cook; intro. by A. N. Pierson, 1920.) Ophelia \times three unnamed seedlings. Bud large, long-pointed; flower large, cupped, double, on long, strong stems; lasting; fragrant. Color white, suffused delicate pink; pink flush deeper in cool weather; almost white on long sunny days.

**Mrs. S. K. Rindge*, Per. (Howard & Smith, 1919.) Rayon d'Or \times Frau Karl Druschki. Type, Rayon d'Or. Bud very large, long-pointed, stained cadmium-red; flower very large, cupped, semi-double, borne singly on long stem; lasting; fragrant. Color deep golden yellow, without tint of copper; becomes suffused with soft pink with age instead of fading. Foliage sufficient, large, leathery, glossy light green. Growth very vigorous, upright (5 feet); abundant bloomer.

**Mrs. Sterling*, H.T. (John Cook, 1918.) Antoine Rivoire \times unnamed pink seedling. Bud very large, long-pointed; flower very large, globular, semi-double, borne singly on long stem; very lasting; fragrant. Color clear rose-pink. Foliage

sufficient, glossy, dark green, large. Vigorous, upright grower, reaching a height of 3 feet; blooms continuously from June to October. Freezes to 10 inches. Silver Medal, Hartford Trial Grounds, 1918.

Mrs. Walter T. Sumner, H.T. (Clarke Bros., 1919.) Ophelia × Hadley. Bud long-pointed; flower large (5 inches diameter), semi-single (12 to 18 petals), in clusters of 5 to 10; lasting; very fragrant. Color carmine, shading to deep rose-pink. Foliage dark green. Growth upright; free bloomer (115 blooms outdoors).

**Pilgrim*, H.T. (Montgomery Co.; intro. by A. N. Pierson, 1920.) Bud medium size, long-pointed, opening perfectly; flower large, high center, double, borne singly on long, strong stem; lasting; tea fragrance. Color silvery pink, outside clear rose-pink. Foliage abundant, large, leathery, rich green; disease resistant. Vigorous, upright, bushy grower; abundant and continuous bloomer.

**Pink Beauty*, H.T. (John Cook, 1919.) Ophelia × My Maryland. Bud large, long-pointed; flower large, open form, semi-double, borne singly on long stem; very lasting; strong fragrance. Color clear pink. Foliage abundant, leathery, dark green, large. Growth very vigorous, upright, reaching a height of 3 feet; profuse, continuous bloomer from May to September. Freezes to 4 inches. Certificate of Merit, Hartford Trial Grounds.

**Red Columbia*, H.T. (J. Hill Co., 19—.) Sport of Columbia. Type, Columbia, with stronger bud. Flower large, very lasting, with strong fragrance. Color rich velvety scarlet. Foliage abundant, leathery. Very vigorous grower.

**Rose Marie*, H.T. (F. Dorner & Sons, 1918.) Hoosier Beauty × Sunburst. Bud large, globular; flower very large, cupped, double, borne singly on long stem; fragrant. Color clear rose-pink. Foliage abundant, glossy dark green, large; disease resistant. Vigorous grower of upright habit; produces a profusion of blooms during July and August.

Silver Star, H.W. (F. R. M. Undritz; intro. by Reinhold Undritz, 1919.) Silver Moon × Marie Van Houtte. Type, Silver Moon. Bud medium size, ovoid, yellow; flower large, open form, semi-double, borne singly on medium-strong stems; very lasting; fragrant. Color white, tinged cream; golden yellow stamens. Foliage sufficient, glossy green, medium size; disease resistant. Growth very vigorous (4 feet high; 4 feet in diameter); semi-climber; produces an abundance of bloom from June to October. Uninjured by frost last winter. Blooms can be cut on stems a foot long.

**Wm. F. Dreer*, H.Per. (Howard & Smith, 1920.) Result of crossing unnamed seedlings. Type, Los Angeles. Bud large; flower large, high center, double, borne singly on long stem; lasting; fragrant. Color soft, silvery shell-pink, base of petals golden yellow, which sometimes suffuses the entire flower, this golden suffusion being particularly brilliant early and late in the season. Foliage abundant, light green. Profuse bloomer.

HOLLAND

**Benedictus XV*, H.T. (Leenders & Co., 1917.) Jonkheer J. L. Mock × Marquise de Sinety. Type, Jonkheer J. L. Mock. Bud very large, long-pointed; flower very large, full, double, borne singly on long stems; lasting; strong fragrance. Color rosy white. Foliage sparse, large, glossy green. Very vigorous, upright grower, producing an abundance of bloom.

**Comtesse d'Ansembourg*, H.T. (Leenders & Co., 1918.) Etoile de France × Marquise de Sinety. Type, Kaiserin Auguste Victoria. Bud large, long-pointed; flower very large, full, borne several together, on long stems; very lasting; strong fragrance. Color yellowish white. Foliage abundant, large, glossy dark green. Vigorous upright grower; abundant bloomer.

**F. J. Grootendorst*, H.Rug. (F. J. Grootendorst & Sons, 1918; disseminated

in U. S. by A. N. Pierson, Inc., 1920.) *Rosa rugosa rubra* × Baby Rambler. Type, Rugosa foliage, Polyantha flowers. Bud small, ovoid; flower small, open, double, borne in clusters on average-length stems; very lasting; slight fragrance. Color bright red; edges of petals serrated like a carnation. Foliage sufficient, small, leathery, wrinkled, dark green; disease resistant. Vigorous grower of bushy habit, bearing a profusion of blooms from June to October. Very hardy. First-Class Certificate, Boskoop, 1912.

**General Snyders*, H.T. (Leenders & Co., 1917.) Mme. Melanie Soupert × George C. Waud. Type, General-Superior Arnold Janssen. Bud very large, long-pointed; flower large, full, double, borne, several together, on long stems; lasting; strong fragrance. Color carmine. Foliage sufficient, medium size, glossy light green. Vigorous grower of bushy habit; profuse bloomer.

**Hortulanus Fiet*, H.T. (Leenders & Co., 1919.) Mme. Melanie Soupert × Paul Lédé. Type, Mme. Melanie Soupert and Ophelia. Bud very large, long-pointed; flower large, full, double, borne singly on average-length stems; lasting; strong fragrance. Color, apricot. Foliage sufficient, of medium size, glossy, green. A vigorous grower of bushy habit, bearing an abundance of blooms.

**Jacques Hackenburg*, H.T. (Leenders & Co., 1919.) Jonkheer J. L. Mock × Marquise de Sinety. Type, Jonkheer J. L. Mock and La France. Bud very large, long-pointed; flower very large, full, double, borne singly; lasting; strong fragrance. Color pale reddish lilac. Foliage abundant, large, glossy green. A vigorous, upright grower and abundant bloomer.

**Mevrouw A. Del Court Van Krimpen*, H.T. (Leenders & Co., 1917.) Unnamed seedling × Prince de Bulgarie. Type, Prince de Bulgarie. Bud very large, long-pointed; flower very large, full, borne, several together, on long stems; lasting; strong fragrance. Color rosy white and orange. Foliage abundant, large, glossy light green. A vigorous grower of bushy habit and a profuse bloomer.

**Mevrouw Boreel Van Hogelanders*, T. (Leenders & Co., 1918.) Mme. Leon Pain × Mme. Antoine Mari. Type, Mme. Antoine Mari. Bud medium size, globular; flower medium size, globular, borne, several together, on average-length stems; very lasting; strong fragrance. Color rosy white and carmine. Foliage abundant, medium size, leathery, dark green. A vigorous grower of bushy habit and a profuse bloomer.

**Mevrouw Natalie Nypels*, Poly. (Leenders & Co., 1919.) Orleans Rose × (Comtesse de Cayla × Jaune Bicolor). Type, Rödhätte. Bud large; flower large, open form, double, borne in clusters; very lasting; strong fragrance. Color hydrangea-pink. Foliage abundant, small, leathery, bronze-green. A vigorous grower of bushy habit and a profuse bloomer. Prize of Honor, Silver Gilt Medal, and Award of Merit.

**Mevrouw Smits Gompertz*, H.T. (Leenders & Co., 1917.) Lady Wenlock × (Mme. T. W. Budde × Souv. de Catherine Guillot). Type, Mrs. Aaron Ward. Bud medium size, long-pointed; flower medium size, full, borne, several together, on medium-long stems; very lasting; strong fragrance. Color coppery orange and lilac. Foliage abundant, medium size, glossy dark green. A vigorous, bushy grower and a profuse bloomer. Award of Merit.

**Mme. Annette Aynard*, H.T. (Leenders & Co., 1919.) Mme. Caroline Testout × Prince de Bulgarie. Type, Marquise de Sinety in habit; Mme. Constant Soupert in bloom. Bud very large, globular; flower very large, full, double, borne singly on average-length stem; lasting; strong fragrance. Color amber-yellow. Foliage sufficient, glossy dark green. A vigorous grower of bushy habit, producing an abundance of blooms.

**Princess Juliana*, H.T. (Leenders & Co., 1918.) General MacArthur × Marie Van Houtte. Type, Gruss an Teplitz. Bud medium size, long-pointed;

flowers medium size, full, borne, several together, on long stems; very lasting; strong fragrance. Color red and black. Foliage abundant, medium size, glossy dark green. A vigorous grower of bushy habit, producing an abundance of blooms.

GERMANY

Abendröte, H.P. (Ebeling, 1919.) Frau Karl Druschki × Juliet. Flowers somewhat paler in color than Mme. Edouard Herriot. A hardy variety of dwarf habit, blooming continuously from June to October.

**Dr. Helfferich*, H.T. (Lambert, 1919.) Gustav Grünerwald × Mrs. Aaron Ward. Type, Mme. Caroline Testout. Bud very large, ovoid, rose-orange; flower very large, full, cupped, double and semi-double, borne singly and several together on long, strong stems; lasting; strong fragrance. Color rose, center yellowish orange, edges silvery. Foliage sufficient, medium size, glossy green; disease resistant. Vigorous grower of upright habit, reaching a height of 2 feet, and bearing an abundance of blooms intermittently. Hardy.

Frau Dr. Krüger, H.T. (Kiese, 1919.) Henriette de Loew × Mme. Caroline Testout. Flower cream-salmon on golden ground, borne singly on long, strong stems. A vigorous grower with large foliage.

Frau Hedwig Wagner, H.T. (Kiese, 1919.) Enchantress × Mrs. W. J. Grant. Bud long-pointed; flower double, fragrant, borne on long stems. Color Centifolia pink. Foliage disease resistant. Vigorous grower and free bloomer.

Heinrich Conr. Söth, H.Poly. (Lambert, 1919.) Geheimrat Dr. Mittweg × Kapuziner Austria lutea. Bud small; flower small, single, borne in pyramidal clusters; fragrant. Color light rosy red, with white eye—resembles Leuchstern, but redder. Foliage large, glossy dark green. A very vigorous grower of upright, bushy habit, and a continuous bloomer all season. Very hardy.

Königin Viktoria von Schweden, H.T. (Ries, 1919.) Mme. Segond Weber × Mrs. Joseph Hill. Type, Ophelia. Flower double, well-formed, borne singly. Color light saffron-yellow, passing to pale salmon-pink. Foliage glossy. Vigorous, upright grower.

Lisbeth Stellmacher, Poly. (Lambert, 1919.) Aglaia × Marie Van Houtte. Bud small; flower small, full, double, borne singly and several together on short stems; fragrant. Color pure golden yellow, with bright red spotted border and rose stripes. Foliage glossy, dark green. Dwarf grower.

Walkure, H.T. (Ebeling, 1919.) Frau Karl Druschki × Mme. Jenny Gillemot. Type, improved Mme. Jenny Gillemot. Bud long-pointed; flower double, with high center, borne singly. Color cream-white, ochre-yellow toward the center. Vigorous grower. Hardy.

AUSTRALIA

Australia Felix, H.T. (Alister Clark, —.) Bud well-formed, deep reddish pink; flower open form, cupped; very lasting; La France fragrance. Color, soft pink, with outer petals deep reddish pink. Foliage abundant, glossy green. Vigorous, bushy grower, blooming continuously from June to October. Hardy. Rain does not affect flowers. Gold Medal, N. R. S., Victoria, B.C.

Borderer, Poly. (Alister Clark; intro. by N. R. S. of Victoria, 1918.) Flowers double, with Wichuraiana fragrance. Color, shades of pink, copper, and amber combined. Foliage good. A continuous bloomer. Hardy in Australia.

Sunny South, H.T. (Alister Clark; intro. by N. R. S. of Victoria, 1918.) Flower, pink, flushed carmine, on a yellow base. Foliage handsome. Strong constitution; good habit. A continuous bloomer from June to October. Gold Medal, N. R. S., Victoria.

The National Rose Test-Garden to Date

By F. L. MULFORD

Department of Agriculture, Washington, D. C.

EDITOR'S NOTE.—The desire of the members of the American Rose Society for accurate information concerning rose varieties has been made apparent. It is for this reason that the first full report on the National Rose Test-Garden, mostly summarizing four years of observation, is printed.

THE following report of the behavior of the roses in the National Rose Test-Garden is designed to supplement the previous reports. On pages 77 and 78 of the 1917 Annual appeared a brief summary of the satisfactory roses in the garden. On pages 124–128 of the 1918 Annual is a description of the behavior of the Tea and Hybrid Tea roses, and on pages 118–122 of the 1919 Annual a tabular statement of the behavior of the same roses. In this report the previous tabular results are averaged and the 1919 records are added.

The Hybrid Perpetuals are mentioned in a six-line summary on page 131 of the 1918 Annual, while a table of the records of their performance appears on pages 117 and 118 of the 1919 Annual. The present report summarizes the previous results.

The Dwarf Polyanthas are discussed on pages 128 and 129 of the 1918 Annual and given in tabular form in this report.

The only previous report of the Rugosa roses is a paragraph on page 132 of the 1918 Annual.

Reports of the Wichuraiana and Multiflora roses appear on pages 129–131 of the 1918 Annual and in this report. The other roses reported this time have only been mentioned previously in short paragraphs in the 1918 Annual.

The relative significance of the terms used in the various tables are:

Habit.—Upright, open or compact, spreading.

Growth.—Of bush roses: Vigorous, moderate, weak. Of climbing roses: Plentiful, sufficient, sparse.

Bloom.—Profuse, abundant, free, moderate, sparse.

The climbing roses are, part of them, treated so differently from the others that the most practical method of interpreting their growth seemed to indicate whether or not they would produce sufficient new wood to make a good showing of flowers. Many of the roses in the rose-garden are restricted to three or

four canes a season and these are encouraged to make the greatest possible growth. A majority of the climbers, however, are encouraged to make as many shoots as possible, which are not permitted to grow to a height of more than six feet. This difference of treatment, which was introduced to add to the attractiveness of the garden, creates an element of difficulty when attempting to make comparative observations.

HYBRID PERPETUAL ROSES

NAME	Average Years	First Bloom	No. of blooms per plant						Plants Noted
			June	July	Aug.	Sept.	Oct.	Total	
Alfred Colomb	3	May 29	45	10	5	5	4	69	2
Baron de Bonstetten	3	May 25	44	2				46	3
Baroness Rothschild	2	May 30	20	5				25	6
Black Prince	1	May 29	37	4	4	2	1	44	3
Captain Christy	3	May 20	7	5	2	2	2	18	3
Captain Hayward	1	May 20	63	2	6		1	72	2
Clio	3	May 28	31	12	2	1		46	2
Coquette des Alpes, H. Nois.	3	May 26	21	38	15	13	11	98	3
Coquette des Blanches, H. Nois.	3	May 22	37		1		1	39	3
Countess of Roseberry	3	May 26	43	9	15	8	5	80	2
Duke of Edinburgh	3	May 24	16	2	1			19	2
Earl of Dufferin	3	May 28	13	9	1			23	3
Eugene Furst	3	May 22	69	14	2	4	1	90	1
Fisher Holmes	3	May 24	31					31	2
Francois Levet	3	May 21	32	14	4	2	1	53	3
Frau Karl Druschki	3	May 22	19	23	8	9	4	63	3
Gen. Jacqueminot	3	May 23	24	10	2	1	1	38	2
Gen. Washington	3	May 25	30	13	21	22	12	98	2
George Arends	3	May 29	22	20	8	5	6	61	2
Gloire de Chedane Guinoisseau	1	May 24	8	1				9	3
Gloire de l'Exposition de Bruxelles	1	June 1	21	6				27	3
Heinrich Munch	3	May 30	16	7	3		1	27	1
Her Majesty	3	May 29	6	2				8	2
Hugh Dickson	3	May 20	20	11	2			33	2
J. B. Clark	3	May 22	64	20	2	1	1	88	3
John Hopper	3	May 22	26	10	1	1		38	1
John Keynes	3	May 24	111	12			1	124	1
Jubilee	3	May 21	27	4	2			33	2
Jules Margottin	3	May 25	58	7	10			75	3
Mabel Morrison	3	May 28	28	8	4	2	1	43	1
Mme. Charles Wood	3	May 28	23					23	3
Mme. Gabriel Luizet	2	May 25	74		2		1	77	1
Mme. Masson	3	May 25	8	10	3	3	3	27	2
Mme. Victor Verdier	1		12	3	1	1		17	2
Magna Charta	3	May 26	25	6				31	2
Maharajah	2	May 24	20					20	2
Marchioness of Lorne	3	May 24	29	13	3			45	1
Marchioness of Dufferin	2	June 2	1	3		1	1	6	1
Margaret Dickson	3	May 29	7	2		1	1	11	2
Marie Baumann	3	May 26	23	11	5	5	1	45	1
Marshall P. Wilder	3	May 23	38	5	3	2	1	49	3
Mrs. John Laing	3	May 29	15	8	7	7	9	46	3
Mrs. R. G. Sharman-Crawford	3	May 23	20	12	13	9	6	60	3
Oakmont	3	May 22	76	17	3	1	1	98	3
Paul Neyron	3	May 26	17	4	6	5	3	35	3
Pierre Notting	3	May 25	11	1	1			13	2
Pius IX	1	May 18	101	7	4	8	6	126	3
President Lincoln	3	May 24	4	1				5	3
Tom Wood	3	May 26	33	7	5	7	3	55	3
Ulrich Brunner	3	May 25	15	7	3			25	3
Victor Verdier	3	May 22	95	6	4	1	1	107	3

NATIONAL ROSE TEST-GARDEN TO DATE 139

HYBRID TEA AND TEA ROSES

NAME	Average Years	First Bloom	No. of blooms per plant					Plants Noted
			June	July	Aug.	Sept.	Total	
Alexander Hill Gray	1	May 27	12	22	26	7	67	6
Alsterufer	3	May 24	29	12	10	3	54	5
Ambrosia	3	June 25	1	2	1	2	6	4
Apotheker Georg Hofer	1	May 27	55	10	12	11	88	6
Arthur R. Goodwin	1		5	13	13	3	34	1
Balduin	3	June 8	19	15	10	15	59	2
Beaute Inconstante, T.	1	May 25	6	9	14	2	31	1
Betty	3	May 24	6	9	4	5	24	6
Blumenschmidt, T.	3	May 24	12	18	14	9	53	5
Bridesmaid, T.	2	May 24		3	2		5	3
British Queen	3	May 30	9	9	5	5	28	3
Catherine Mermet, T.	3	May 30	3	4	3	2	12	4
Champ Weiland	2	May 24	3	6	3	3	15	3
Chateau de Clos Vougeot	3	May 26	8	7	2	2	19	3
Cleveland	2	June 5	1	7	1	1	10	6
Col. R. S. Williamson	3	May 25	6	7	4	4	21	6
Countess of Gosford	3	May 18	14	11	7	21	53	5
Dawn	1	May 27	4	1			5	3
Defiance	2	June 8	1	6	1	1	9	2
Dora	1	June 12	1	4			6	1
Dorothy Page-Roberts	3	May 28	12	7	6	3	28	5
Dr. Grill, T.	3	May 27	19	23	25	18	85	3
Duchesse de Brabant, T.	3	May 30	10	9	2	12	33	5
Duchess of Albany, T.	3	May 28	3	6	2	3	14	5
Duchess of Westminster	3	May 28	4	5	1	1	11	2
Earl of Warwick	1	June 8	3	3	4		10	2
Etoile de France	3	May 23	9	7	3	6	25	2
Etoile de Lyon, T.	3	May 31	2	3	4	4	13	2
Farbenkönigin	3	May 22	4	4	2	3	13	4
Frances E. Willard, T.	3	May 29	3	4	1	5	13	6
Freiherr von Marschall	2	May 18	2	1	6	5	14	3
General MacArthur	3	May 21	7	5	6	3	21	3
General-Superior Arnold Janssen	3	May 24	10	12	13	10	45	1
George Dickson	3	May 22	15	3	1		19	2
George C. Waud	1	June 8	2	9	3	2	16	2
Gloire Lyonnaise	3	May 20	19	11		5	35	3
Gorgeous	3	May 21	2	2	4	3	11	6
Grace Darling	1	June 4	10	9	5	4	28	6
Grace Molyneux	3	May 24	9	4	6	5	24	6
Grandesse Royale	3	May 28	33	13	3	2	51	2
Grossherzog Friedrich	3	May 21	14	11	7	6	38	3
Gruss an Teplitz	3	May 21	54	41	28	17	140	6
Gustav Grünerwald	3	May 23	17	17	9	10	53	6
Hadley	3	June 3	3	1	2	2	8	6
Helen Good, T.	3	June 4	1	1	1	2	5	2
H. F. Eilers	3	June 2	4	5	4	4	17	2
Henry M. Stanley, T.	1	June 8	1		3	2	6	1
Highland Mary, T.	1	July 19		1	1		2	2
Hoosier Beauty	3	June 4	3	3	3	3	12	6
Irish Brightness	1	May 13	73	5	2		80	3
Irish Fireflame	3	May 23	10	12	8	3	33	5
Isabella Sprunt, T.	3	May 19	15	18	14	24	71	6
Jonkheer J. L. Mock	3	May 26	3	4	2	3	12	4
Joseph Hill	3	May 25	4	5	3	2	14	5
Kaiserin Auguste Victoria	3	May 25	9	6	5	5	25	6
Killarney	3	May 24	8	6	5	3	22	6
Killarney Queen	3	May 22	13	14	7	5	39	5
Killarney, White	3	May 25	3	6	2	2	13	5
Königin Carola	3	May 25	6	8	1	3	18	4
La France	3	May 26	8	13	6	3	30	2
La France, Striped	3	May 24	12	14	8	9	43	4
La France, White	3	May 23	16	16	7	6	45	3
La Tosca	3	May 23	23	19	11	9	62	5
Lady Alice Stanley	3	May 21	13	9	6	6	34	5
Lady Ashtown	3	May 19	13	12	7	6	38	3

HYBRID TEA AND TEA ROSES, continued

NAME	Average Years	First Bloom	No. of blooms per plant					First Bloom
			June	July	Aug.	Sept.	Total	
Lady Hillingdon, T.	3	May 24	6	18	7	6	37	3
Lady Ursula	3	May 21	11	13	12	8	44	5
Laurent Carle	3	May 20	10	7	6	6	29	5
Letty Coles, T.	1	May 29	2	13	3	1	19	3
Lieutenant Chaure	3	May 24	9	12	6	7	34	4
Lucien Chaure	3	May 24	9	9	7	5	30	5
Louise Lilia	3	May 24	7	7	3	5	22	4
Maman Cochet, T.	3	May 28	7	13	4	6	30	6
Maman Cochet, White, T.	3	May 26	6	5	5	3	19	6
Marcia Coolidge	1	May 20	6	4	3	7	20	1
Marie Guillot, T.	1	June 22	1	2	2	5	5	3
Marie Lambert, T.	3	May 19	11	22	20	21	74	2
Marie Van Houtte, T.	3	May 18	3	8	6	5	22	5
Marquise de Ganay	1	May 27	34	14	9	8	65	5
Marquise de Querhoent, T.	3	May 29	12	12	5	9	38	4
Marquise de Sinety	3	May 30	3	2	3	1	9	2
Mary, Countess of Ilchester	3	May 23	23	18	10	7	58	3
Mevrouw Dora van Tets.	1	June 8	1	6	2	2	11	1
Milady	1	June 8	1	4	3		8	2
Miss Cynthia Forde	3	May 24	18	16	8	7	49	2
Miss Genevieve Clark	3	May 21	59	34	24	14	131	5
Mme. Abel Chatenay	1		5	8	5		18	1
Mme. Berthe Fontaine	2	May 25	22	9	4	7	42	3
Mme. Camille, T.	3	May 27	14	14	10	10	48	5
Mme. Caroline Testout	3	May 26	8	9	5	6	28	6
Mme. Colette Martinet	1	May 27	8	8	3	5	24	4
Mme. Francisca Kruger	3	May 27	13	13	11	10	47	4
Mme. Hector Leuillot	3	May 22	4	7	5	4	20	5
Mme. Jean Dupuy, T.	3	May 25	16	22	18	15	71	4
Mme. Joseph Schwartz, T.	3	May 28	9	10	13	19	51	3
Mme. Jules Gravereaux, CLT.	3	May 23	12	10	7	10	39	5
Mme. Jules Grolez	3	May 21	12	14	8	6	40	6
Mme. Leon Pain	3	May 26	14	16	10	8	48	3
Mme. Lambard, T.	3	May 26	16	15	9	8	48	6
Mme. Maurice de Luze	3	May 26	8	9	3	5	25	3
Mme. Paul Euler	3	May 25	4	5	2	1	12	1
Mme. Segond Weber	3	May 23	6	6	2	1	15	2
Mme. Theodore Delacourt	1	June 4	8	6	3	10	27	5
Mme. Welche, T.	3	June 5	2	4	3	1	10	4
Molly Sharman-Crawford, T.	1	June 8	2	9	3	2	16	2
Mrs. Aaron Ward	3	May 26	5	8	5	6	24	2
Mrs. Archie Gray	1	May 27	7	10	4	4	25	5
Mrs. A. R. Waddell	3	May 23	16	13	8	9	46	5
Mrs. B. R. Cant, T.	3	May 16	5	10	7	9	31	2
Mrs. Bayard Thayer	3	June 5	3	3	1		7	4
Mrs. Charles Russell	2	May 28	1	1	1	1	4	5
Mrs. Franklin Dennison	3	May 27	4	3	1	1	9	3
Mrs. George Gordon	3	May 26	5	9	4	3	21	6
Mrs. Herbert Hawksworth, T.	3	May 30	7	7	3	3	20	2
Mrs. Herbert Stevens, T.	3	May 21	18	15	9	18	60	3
Mrs. Hubert Taylor, T.	1		1	2	1		4	1
Mrs. Hugh Dickson	1			1		1	2	1
Mrs. Myles Kennedy, T.	3	May 25	3	1	2	1	7	2
Mrs. T. Hillas	1	May 27	10	11	7	4	32	3
Mrs. Wakefield Christie-Miller	3	May 23	15	11	13	10	49	6
My Maryland	3	June 8	5	3	2	4	14	2
Natalie Bottner	1		1		2	1	4	1
Norma	3	May 28	10	8	6	4	28	3
Ophelia	3	May 24	7	6	7	3	23	6
Panama	1		6	8	13	15	42	1
Papa Gontier, T.	3	May 18	11	6	6	11	34	5
Perle des Jardins, White, T.	1		2	3	2		7	3
Perle von Godesberg	1	May 28	6		1	2	9	1
Prima Donna	2	May 20	7	10	4	4	25	8
Primerose	1	May 27	14	2	2	4	22	6

NATIONAL ROSE TEST-GARDEN TO DATE 141

HYBRID TEA AND TEA ROSES, continued

NAME	Average Years	First Bloom	No. of blooms per plant					Plants Noted
			June	July	Aug.	Sept.	Total	
Prince de Bulgarie	3	May 24	4	7	4	4	19	4
Princess Bonnie	3	May 25	12	8	2	4	26	2
Radiance	3	May 24	16	15	9	8	48	6
Red-Letter Day	3	May 25	5	6	4	5	20	2
Red Radiance	3	May 20	12	16	13	11	52	6
Reine Marguerite d'Italie	3	May 24	32	27	22	17	98	2
Richmond	3	May 26	10	9	2	2	23	3
Seabird	1	May 4	6	6	3	3	18	1
Senator Mascaraud	1	June 4	9	4	6	4	23	5
September Morn	3	May 24	3	4	2	1	10	3
Simplicity	3	May 25	7	14	6	6	33	5
Souv. de Gustave Prat	3	May 23	7	11	7	6	31	6
Souv. of Wootton	3	May 18	6	12	4	3	25	3
Sunburst	1	May 27	1	3	3	1	8	5
The Queen, T.	1	June 4	3	10	13	4	30	6
Virginia R. Coxe	3	May 23	28	32	12	7	79	5
Viscountess Folkestone	1	June 8	1	14	6	3	24	1
W. E. Lippiatt	3	May 21	11	2	1		14	2
Wellesley	3	May 27	13	9	9	7	38	5
Wm. R. Smith, T.	3	May 27	4	4	6	3	17	4
Willowmere	1		14	1	6	1	22	1
Winter Gem, T.	3	May 24	4	8	7	8	27	2

BUSH ROSES—RUGOSA HYBRIDS

NAME	Average Yrs.	First Bloom	Quantity of Bloom						Last Bloom	Height Feet	Habit	Growth
			May	June	July	Aug.	Sept.	Oct.				
Agnes Emily Carman	2	May 12	M.	S.	S.	S.	S.	V. S.	Oct. 3	3	U.	V.
Alice Aldrich	4	May 24	S.	S.	S.	V. S.	V. S.		July 20	3	U.	V.
Amelie Graveraux	4	May 20	S.	S.	V. S.	V. S.	V. S.		Oct. 5	6	Sp.	V.
Arnold	4	May 24	S.	S.	V. S.	V. S.	V. S.		Aug. 6	4	U.	V.
Blanc Double de Coubert	4	May 10	M.	S.	S.	S.	S.	V. S.	Oct. 13	4	U.	V.
Charles F. Worth	4	May 20	S.	S.	S.	S.	S.	V. S.	Sept. 5	2	U.	V.
Conrad F. Meyer	4	May 29	M.	M.	S.	S.	S.		July 4	5	U.	V.
Hansa	4	May 15	M.	S.	S.	S.	S.	S.	Oct. 17	5	U.	V.
Hansen	3	May 16	M.	M.	S.	S.	S.	S.	Sept. 27	5	U.	V.
Kamshatika	4	May 14	S.	S.	S.	S.	S.	S.	Sept. 19	4	U.	V.
Mme. Georges Bruant	4	May 19	M.	S.	S.	S.	S.	S.	Oct. 11	4	Sp.	V.
Mme. L. Villeminot	4	May 20	S.	S.	S.	S.	S.	S.	July 28	4	U.	V.
Magnifica	4	May 13	M.	S.	M.	S.	S.	S.	Oct. 7	4	U.	V.
Marie Fuller	4	May 14	S.	S.	S.	S.	S.	S.	Sept. 28	5	C.	V.
New Century	4	May 14	M.	M.	M.	M.	M.		Oct. 19	6	C.	V.
Nova Zembla	4	May 17	M.	S.	S.	S.	S.	S.	Oct. 19	6	U.	V.
Prostrata	3	May 25	M.	S.	S.	S.	S.		July 13	1	P.	M.
Regina Badet	3	May 18	M.	S.	S.	M.	S.	S.	Oct. 3	5	U.	M.
Repens alba	3	May 13	S.	S.	S.	S.	S.	S.	Oct. 16	2	Sp.	V.
Rose à Parfum de l'Hay	4	May 20	M.	S.	S.	S.	S.	S.	Oct. 15	3	Sl.	V.
Roseaie de l'Hay	4	May 15	S.	S.	S.	S.	S.	V. S.	Sept. 17	3	U.	V.
Rubra plena	3	May 12	M.	S.	S.	S.	S.	V. S.	Oct. 13	4	C.	V.
Rugosa	4	May 19	M.	S.	S.	S.	V. S.		Sept. 3	6	O.	V.
Rugosa alba	4	May 12	S.	S.	S.	S.	S.	S.	Oct. 11	5	U.	V.
Sir Thomas Lipton	4	May 16	M.	S.	S.	S.	S.	S.	Sept. 27	6	U.	V.
Souv. de Pierre Leperdrieux	4	May 12	M.	S.	S.	S.	S.	S.	Oct. 20	4	U.	V.
W. Martin	4	June 4	M.	M.					June 16	5	U.	V.

Abbreviations.—A., abundant; C., compact; F., free; L., low; M., moderate; O., open; P., prostrate; Plent., plentiful; S., sparse; Sl., slim; Sm., small; Sp., spreading; Suff., sufficient; U., upright; V., vigorous; V. S., very sparse; W., weak.

CLIMBING ROSES—WICHURAIANA HYBRIDS

NAME	Average	First Bloom	Quantity of Bloom	Last Bloom	Amount of Growth
Adelaide Moulle	2 yrs.	May 25	Moderate	June 16	
Alba rubrifolia	4 yrs.	June 5	Moderate	June 19	Abundant
Alberic Barbier	4 yrs.	May 27	Moderate	June 17	Abundant
Alida Lovett	4 yrs.	May 27	Moderate	June 13	Abundant
American Beauty	4 yrs.	June 20	Free	*July 8	Plentiful
American Pillar	4 yrs.	June 2	Abundant	June 26	Abundant
Amethyste	2 yrs.	June 1	Free	June 14	Plentiful
Aviateur Bleriot	3 yrs.	June 3	Moderate	June 12	Moderate
Bess Lovett	4 yrs.	May 29	Abundant	June 19	Abundant
Birdie Blye	4 yrs.	May 25	Free	*June 18	Dwf.bushy
Bridal Wreath	4 yrs.	May 25	Moderate	June 7	Plentiful
Christine Wright	4 yrs.	May 21	Moderate	*June 15	Abundant
Coronation	3 yrs.	June 5	Abundant	*June 27	Plentiful
Dazzling Red	4 yrs.	May 28	Free	June 24	Abundant
Debutante	4 yrs.	June 7	Moderate	June 22	Sufficient
Dr. W. Van Fleet	3 yrs.	May 25	Free	June 19	
Dorothy Dennison	4 yrs.	June 9	Free	July 2	Abundant
Dorothy Perkins, Pink	4 yrs.	June 8	Free	June 28	Abundant
Dorothy Perkins, White	4 yrs.	June 8	Free	June 29	Abundant
Edmond Proust	3 yrs.	May 30	Sparse	June 20	Plentiful
Ethel	2 yrs.	June 3	Free	June 15	
Evangeline	4 yrs.	June 9	Free	June 27	Abundant
Excelsa	4 yrs.	June 9	Abundant	July 2	Abundant
Farquhar	3 yrs.	June 2	Moderate	June 24	Abundant
Ferdinand Roussel	2 yrs.	May 28	Moderate	June 11	
Frau von Brauer	3 yrs.	June 5	Free	June 20	Plentiful
Gardenia	4 yrs.	May 24	Moderate	June 15	Abundant
Garisenda	2 yrs.	May 24	Sparse	June 18	
Hiawatha	4 yrs.	June 8	Abundant	July 4	Abundant
Jean Girin	3 yrs.	June 5	Moderate	*July 12	Plentiful
Jersey Beauty	4 yrs.	June 2	Sparse	June 20	Plentiful
Kalmia	2 yrs.	June 5	Free	June 21	
Klondyke	3 yrs.	May 28	Moderate	June 16	Plentiful
Lady Gay	4 yrs.	June 7	Free	June 29	Plentiful
Lady Godiva	4 yrs.	June 9	Free	June 29	
Leontine Gervais	2 yrs.	June 1	Moderate	June 11	
Longwood	4 yrs.	May 25	Free	June 23	Abundant
Mme. Ghys	4 yrs.	May 30	Abundant	*June 15	Plentiful
Manda's Triumph	3 yrs.	May 30	Free	June 9	Abundant
Mary Lovett	4 yrs.	May 26	Moderate	June 15	Plentiful
May Queen	4 yrs.	May 25	Moderate	June 18	Plentiful
Milky Way	3 yrs.	June 8	Free	July 3	Plentiful
Minnehaha	4 yrs.	June 6	Free	*July 6	Abundant
Miss Helyett	2 yrs.	May 19	Moderate	June 6	Sufficient
Mrs. Lovett	2 yrs.	June 5	Moderate	June 24	Plentiful
Mrs. M. H. Walsh	4 yrs.	June 11	Moderate	July 3	Plentiful
Pearl Queen	4 yrs.	May 22	Moderate	June 14	Abundant
Petite Jeanne	3 yrs.	June 5	Free	*June 26	Plentiful
Petit Louis	3 yrs.	June 5	Moderate	June 18	Abundant
Pink Roamer	4 yrs.	May 29	Moderate	June 14	Abundant
Prof. C. S. Sargent	4 yrs.	June 2	Moderate	June 18	Plentiful
Purity	3 yrs.	June 5	Moderate	June 15	Abundant
Rowena	3 yrs.	June 2	Moderate	June 24	Plentiful
Ruby Queen	4 yrs.	May 30	Moderate	June 11	Abundant
Silver Moon	4 yrs.	May 28	Moderate	June 16	Very abund.
Snowdrift	3 yrs.	June 2	Sparse	June 16	Abundant
Sodenia	3 yrs.	June 5	Free	June 22	
Source d'Or	3 yrs.	June 1	Moderate	June 13	Plentiful
South Orange Perfection	4 yrs.	June 6	Sparse	June 21	Abundant
Universal Favorite	4 yrs.	May 31	Sparse	June 21	Abundant
W. C. Egan	4 yrs.	May 30	Moderate	June 17	Plentiful
Wedding Bells	4 yrs.	May 29	Abundant	June 6	Plentiful
Wichmoss	4 yrs.	May 30	Free	June 18	Plentiful
Wichuraiana, Variegated	4 yrs.	June 7	Sparse	June 23	Moderate

*These varieties give sparse bloom after the date mentioned, in some cases extending to frost.

**BABY RAMBLER ROSES—DWARF MULTIFLORA
(POLYANTHA) HYBRIDS**

NAME	Average Yrs.	First Bloom	Quantity of Bloom						Last Bloom	Height, Feet	Habit	Growth
			May	June	July	Aug.	Sept.	Oct.				
Ännchen Müller	4	May 29	S.	M.	S.	M.	S.	S.	Oct. 24	1½	Sp.	M.
Baby Dorothy	4	May 20	M.	A.	M.	M.	F.	M.	Oct. 24	1½	C.	M.
Baby Elegance	4	May 18	M.	F.	S.	M.	M.	M.	Oct. 24	2	C.	V.
Baby Rambler	4	May 22	M.	A.	F.	F.	F.	M.	Oct. 24	3	C.	V.
Baby Tausendschön	4	May 19	M.	F.	M.	S.	M.	M.	Oct. 18	1½	C.	F.
Bordure	4	June 3	S.	M.	M.	M.	S.	M.	Oct. 24	2	C.	M.
Cecile Brunner	4	May 21	M.	S.	S.	S.	M.	S.	Oct. 23	1½	O.	W.
Clotilde Pfitzer	4	May 21	M.	A.	M.	M.	F.	M.	Oct. 23	2	C.	V.
Ellen Poulsen	4	May 20	F.	M.	M.	M.	M.	M.	Oct. 23	1	O.	M.
Erna Teschendorff	4	May 25	M.	F.	M.	M.	M.	S.	Oct. 24	2	C.	V.
Eugenie Lamesch	2	May 25	S.	M.	S.	S.	S.	S.	Oct. 17	2	C.	W.
George Elger	3	May 28	S.	S.	M.	M.	M.	M.	Oct. 20	2	C.	W.
Gruss an Aachen	4	May 21	M.	S.	M.	S.	M.	S.	Oct. 23	1½	O.	M.
Jessie	4	June 2	M.	F.	M.	M.	S.	M.	Oct. 24	2	C.	M.
Katharina Zeimet	4	May 23	M.	M.	M.	S.	M.	S.	Oct. 23	2	C.	V.
Leonie Lamesch	4	May 20	M.	S.	S.	S.	S.	S.	Oct. 19	1	Sp.	M.
Mme. Jules Gouchault	4	May 25	M.	F.	M.	F.	M.	M.	Oct. 21	2½	C.	V.
Marie Pavie	4	May 15	M.	M.	M.	M.	M.	S.	Oct. 18	2½	C.	V.
Meadow Sweet	4	May 28	S.	S.	S.	S.	S.	S.	Oct. 24	1½	C.	Sm
Mignonette	4	May 24	S.	M.	S.	M.	M.	S.	Oct. 21	2	C.	V.
Mrs. W. H. Cutbush	4	May 23	M.	F.	M.	F.	M.	M.	Oct. 23	2½	C.	V.
Orleans	4	May 29	M.	A.	F.	F.	M.	S.	Oct. 24	3	C.	V.
Paquerette	4	June 19	S.	S.	S.	S.	S.	S.	Oct. 15	1½	C.	Sm
Pink Souper	4	May 21	S.	S.	S.	S.	S.	S.	Oct. 8	1	Sm	M.
Rodhätte	3	May 14	S.	M.	M.	S.	S.	S.	Oct. 25	1½	O.	M.
Schneekopf	4	May 23	S.	S.	M.	S.	M.	S.	Oct. 22	2½	O.	St.
Tip-Top	4	May 18	M.	M.	M.	S.	M.	S.	Oct. 18	1	O.	M.
Triomphe Orleansais	4	May 21	F.	A.	F.	F.	F.	S.	Oct. 24	3	C.	V.
Yellow Baby Rambler	3	May 27	F.	S.	M.	S.	M.	M.	Oct. 20	1½	C.	V.
Yvonne Rabier	4	May 25	M.	M.	S.	M.	M.	M.	Oct. 23	2	C.	V.

CLIMBING ROSES—TEA HYBRIDS

NAME	Average Yrs.	First Bloom	Quantity of Bloom						Last Bloom	Amount of Growth
			May	June	July	Aug.	Sept.	Oct.		
Gruss an Teplitz	4	May 19	F.	S.	S.	S.	V. S.	V. S.	Sept. 20	Suff.
Kaiserin Auguste Victoria	2	June 8	M.	S.	S.	V. S.	V. S.	V. S.	Aug. 27	Suff.
Killarney	2	May 25	S.	S.	V. S.	V. S.	V. S.	V. S.	Sept. 29	Suff.
La France	3	May 24	S.	S.	S.	V. S.	V. S.	V. S.	Sept. 21	Suff.
Marian Brunell	3	May 27	S.	S.	S.	V. S.	V. S.	V. S.	Oct. 1	Suff.
Marie Guillot	2	May 25	S.	S.	M.	V. S.	V. S.	V. S.	Aug. 2	Suff.
Mme. Berard	3	June 13	S.	S.	S.	S.	S.	S.	Oct. 8	
Mme. Caroline Kuster	2	May 27	S.	S.	S.	S.	S.	M.	Oct. 13	
Mme. Caroline Testout	3	June 3	S.	S.	V. S.	V. S.	V. S.	S.	Sept. 26	Suff.
Mme. Driout	2	May 20	S.	S.	S.	V. S.	V. S.	V. S.	Sept 1	Suff.
Perle des Jardins	2	May 25	F.	S.					June 5	
Reine Marie Henriette	4	May 30	S.	S.	S.	V. S.	V. S.	V. S.	Sept. 12	Suff.
Reine Marie Henriette, Striped	4	May 30	S.	S.	S.	S.	S.		Sept. 15	Plent.
Sheila Wilson	3	May 30	S.	S.	V. S.		V. S.		July 27	M.

CLIMBING ROSES—NOISETTE HYBRIDS

NAME	Average Yrs.	First Bloom	Quantity of Bloom						Last Bloom	Amount of Growth
			May	June	July	Aug.	Sept.	Oct.		
Alister Stella Gray	4	May 27	S.	S.	S.	S.	M.	S.	Oct. 19	Suff.
Ball of Snow	4	May 30	S.	S.	S.	S.	S.	S.	Oct. 21	5 ft.
Caroline Marniesse	4	May 28	S.	M.	M.	S.	S.	M.	Oct. 21	2 ft.
Coquette des Alpes	4	May 27	S.	S.	S.	S.	S.	S.	Oct. 24	4 ft.
Coquette des Blanches	4	May 20	S.	S.	S.	S.	S.	S.	June 11	3 ft.
Felleberg	3	May 26	M.	M.	S.	S.	S.	S.	Oct. 20	1½ ft.
Mme. Alfred Carrière	4	May 22	M.	S.	S.	S.	S.	S.	Oct. 15	Plent.
Meteor	4	May 24	M.	S.	S.	S.	S.	S.	June 10	4 ft.
Meteor, Cl.	3	May 19	S.	V. S.	V. S.	V. S.	S.	S.	Oct. 11	Suff.
Perle des Blanches	4	June 3	S.	S.	S.	S.	S.	S.	Oct. 16	3 ft.
Pillar of Gold	4	June 7	V. S.	S.	S.	V. S.	V. S.	V. S.	Sept. 21	Suff.
William Allen Richardson	4	May 24	S.	S.	S.	S.	S.	S.	Oct. 15	Suff.

CLIMBING ROSES—MULTIFLORA HYBRIDS

NAME	Average	First Bloom	Quantity of Bloom	Last Bloom	Amount of Growth
Aglaia	4 yrs.	May 20	Moderate	*June 9	Abundant
Andreas Hofer	3 yrs.	May 31	Abundant	June 13	Sufficient
Anna Maria	3 yrs.	June 5	Free	June 16	Abundant
Baroness von Ittersum	3 yrs.	May 25	Moderate	June 10	Abundant
Blush Rambler	3 yrs.	June 3	Abundant	June 27	Plentiful
Cecile Brunner	4 yrs.	May 19	Free	*June 16	Abundant
Clotilde Soupert	3 yrs.	May 25	Moderate	*June 14	Plentiful
Countess M. H. Chotek	4 yrs.	May 25	Free	June 8	Plentiful
Dawson	3 yrs.	May 14	Abundant	June 2	Abundant
Electra	3 yrs.	May 28	Moderate	June 19	Abundant
Everblooming Crimson Rambler	3 yrs.	June 6	Free	*June 23	Plentiful
Flame	3 yrs.	June 8	Free	June 28	Abundant
Flower of Fairfield	4 yrs.	June 3	Abundant	*June 21	Plentiful
Goldfinch	4 yrs.	May 26	Free	June 9	Abundant
Graf Zeppelin	4 yrs.	June 2	Free	*June 13	Abundant
Leuchstern	4 yrs.	June 1	Abundant	June 18	Sufficient
Miss G. Messman	4 yrs.	June 1	Sparse	*June 19	Abundant
Mrs. W. H. Cutbush	4 yrs.	May 26	Free	*June 16	Abundant
Mosella	4 yrs.	May 20	Free	*June 9	Plentiful
Multiflora	4 yrs.	May 23	Sparse	June 5	Plentiful
Multiflora Cathayensis	3 yrs.	May 21	Moderate	May 30	Sufficient
Multiflora de la Grifferæ	3 yrs.	May 21	Moderate	June 8	Sufficient
Multiflora japonica	3 yrs.	May 21	Abundant	June 6	Plentiful
Oriole	4 yrs.	May 23	Free	June 11	Abundant
Parkierde	3 yrs.	May 26	Moderate	June 7	
Pompon	4 yrs.	June 3	Moderate	*June 8	Moderate
Queen Alexandra	3 yrs.	May 28	Free	June 8	Sufficient
Rubin	3 yrs.	May 26	Free	June 17	Abundant
Seven Sisters	4 yrs.	May 27	Free	June 14	Abundant
Shatemuc	2 yrs.	May 25	Moderate	June 10	
Superba	1 yr.	June 1	Sparse	June 6	
Tausendschön	3 yrs.	May 24	Free	June 12	Abundant
Thalia	3 yrs.	May 23	Abundant	June 7	Sufficient
Trier	4 yrs.	May 24	Free	*June 22	Plentiful
Veilchenblau	3 yrs.	May 31	Free	June 17	Plentiful
Wartburg	4 yrs.	May 30	Moderate	*June 15	Abundant

*These varieties give sparse bloom after the dates mentioned, in some cases extending to frost.

CLIMBING ROSES—SETIGERA HYBRIDS

NAME	Average Years	First Bloom	Quantity of Bloom	Last Bloom	Amount of Growth
Baltimore Belle	3	June 6	Sparse	June 10	Plentiful
Prairie Queen	4	June 3	Free	June 21	Abundant
Russell's Cottage	3	May 21	Moderate	June 12	Sufficient
Setigera	4	June 18	Abundant	July 5	Abundant
Tennessee Belle	4	June 1	Moderate	June 20	Plentiful

CLIMBING ROSES—MISCELLANEOUS

NAME	Average Years	First Bloom	Quantity of Bloom	Last Bloom	Amount of Growth
Ards Rover, H.P.	2	May 24	Free	*May 30	
Cherokee	3	May 13	Moderate	May 25	Abundant
Dundee Rambler, Arv.	3	May 25	Free	June 7	Plentiful
Empress of China, Beng.	3	May 18	Abundant	May 31	Abundant
Hugh Dickson, H.P.	2	May 25	Moderate	*June 5	
Paul's Carmine Pillar, H.T.	2	May 15	Free	May 30	Sparse
Queen of the Belgians, Arv.	2	May 27	Free	June 9	
Zephirine Drouhin, H. Bour.	4	May 19	Free	*June 9	Abundant

*These varieties give sparse bloom after the dates mentioned, in some cases extending to frost.

The Portland Annual Rose Show

By JESSE A. CURREY

THE ROSE SHOW at Portland, Ore., the largest strictly amateur show in the United States, held annually in June, in connection with the Portland Rose Festival, was a most decided success in 1919. There were 266 individual exhibitors and nearly 500 displays.

The feature of this show is the display of specimen blooms of named varieties in boxes. In this respect it is similar to the annual show in London. This year the classes at Portland contained more box exhibitors than in any previous year. In addition to the box exhibits there are classes for climbing roses, the best three and the best seven Hybrid Teas, Hybrid Perpetuals and Tea roses, the best displays of Mme. Caroline Testout roses (the famous rose of Portland), and a large assortment of basket exhibits.

The "one-rose exhibit," in which every exhibitor shows one rose which he considers the best bloom in his garden on the day

of the show, always attracts attention. This year the first prize for this rose went to Mme. Melanie Soupert, and the second prize was awarded to a wonderful bloom of Mrs. Joseph H. Welch, seven and one-half inches in diameter, which would have carried off first prize but for the fact that the stem had been cut too short.

The roses in the prize-winning box exhibits were as follows:

Best box of six specimen blooms: First prize—Soupert et Notting, Mme. Melanie Soupert, Lyons Rose, Jonkheer J. L. Mock, Mme. Ravary, Harry Kirk. Second prize—Ophelia, Mme. Edouard Herriot, Sunburst, Mme. Melanie Soupert, William R. Smith, Richmond.

Box of twelve specimen roses: First prize—Ophelia, Lady Roberts, Lyons Rose, Los Angeles, Miss Kate Moulton, Yvonne Vacherot, Duchess of Wellington, Jonkheer J. L. Mock, Richmond, Grange Colombe, General MacArthur, Mrs. Wakefield Christie-Miller. Second prize—Frau Karl Druschki, J. B. Clark, Yvonne Vacherot, Avoca, Gustav Grünerwald, Juliet, Lady Ursula, Mrs. Harold Brocklebank, Mrs. Aaron Ward, Hugh Dickson, Duchess of Wellington, Pharisäer.

Box of eighteen specimen roses: First prize—Mme. Melanie Soupert, Mollie Sharman-Crawford, General MacArthur, White Killarney, Hugh Dickson, Betty, Mme. Ravary, Franz Deegen, Lady Roberts, Ards Pillar, Souv. du President Carnot, Reine Marie Henriette, Ophelia, Richmond, White Maman Cochet, Miss Kate Moulton, Kaiserin Auguste Victoria, Mrs. E. J. Holland. Second prize—Mme. Jules Bouché, Yvonne Vacherot, General MacArthur, Los Angeles, May Martin, Mrs. Aaron Ward, Juliet, Lyons Rose, Lady Roberts, Radiance, Jonkheer J. L. Mock, Mme. Abel Chatenay, Paul Neyron, Mrs. Wakefield Christie-Miller, Lady Alice Stanley, Ophelia, Joseph Hill, Duchess of Wellington.

Box of twenty-four specimen roses: First prize—J. B. Clark, Gustav Grünerwald, Hugh Dickson, Coronation, Marquise de Sinety, Duchess of Wellington, Prince de Bulgarie, Königin Carola, Mrs. Charles Russell, André Gamon, Mme. Melanie Soupert, Harry Kirk, Jonkheer J. L. Mock, General MacArthur, Los Angeles, Mrs. Herbert Stevens, Hugh Sutherland, Mme. Charles Lutaud, Rhea Reid, Mons. Rostrand, Constance, Joseph Hill, Sunburst, Juliet. Second prize—Mrs. Wakefield Christie-Miller, Grange Colombe, Mme. Jules Bouché, Captain Hayward, Lady Pirrie, Richmond, Los Angeles, Duchess of Wellington, Lady Roberts, Frau Lila Rautenstrauch, Mrs. Aaron Ward, Yvonne Vacherot, Lyons Rose, Ophelia, Betty, Juliet, Mme. Caroline Testout, George Arends, Mabel Morrison, Gruss an Teplitz, Killarney Brilliant, Paul Neyron, May Martin, Joseph Hill.

Best basket of red roses: First prize—J. B. Clark. Second prize—General MacArthur.

Best basket pink roses: First prize—Mrs. E. G. Hill. Second prize—Mme. Abel Chatenay.

Best basket white roses: First prize—Frau Karl Druschki. Second prize—Gloire Lyonnaise.

Best basket yellow roses: First prize—Mme. Ravary. Second prize—Mme. Melanie Soupert.

Best basket of fifty roses: First prize—Richmond.

Best seven Hybrid Tea roses: First prize—Grange Colombe.

Best seven Hybrid Perpetual roses: First prize—Gloire Lyonnaise.

Best seven Tea roses: First prize—Lady Hillington.

Rose Notes

By THE EDITOR AND OTHERS

A Better Way To Use the Hybrid Rugosas.—The inherent beauty and free spring-blooming qualities of the Conrad Ferdinand Meyer rose are generally recognized, but its vigorous growth often produces unsatisfactory results when used in a bed, a hedge, or even as a single large lawn specimen, and it does not lend itself to easy control in standard or tree form. After trials along the foregoing lines, four well-developed plants were transplanted to form a four-post arch, as indicated in the sketch. The arch was constructed of four one-inch iron-pipe posts, driven into the ground at the corners of an eight-foot square, and a three-eighths-inch round iron rod sprung on each diagonal between the tops of the posts, so that the highest point of the arch at the intersection of the three-eighths-inch rods was eight feet above the ground-line. In the second year the growth was sufficient to cover the arch and an area about five feet square, with the intersection of the rods as its center.

This rose, when well established, will develop from two to five twelve-foot canes a season, which, if trained on the lines of such an arch, will develop blooms throughout to within a foot or two of the ground-line.

On June 1, 1919, this arch was literally covered with more than 100 well-developed blooms of the typical silver-pink of this beautiful Hybrid Rugosa. No special care is required other than tying the canes to the frame of the arch.—W. C. SPRUANCE, Wilmington, Del.



FIG. 5. A four-post arch, covered with the Hybrid Rugosa, Conrad Ferdinand Meyer.



The Rose-Leaf Propagation Experiment.—On page 131 of the 1919 Annual, Mr. Charles E. F. Gersdorff reported a most interesting experiment undertaken to determine whether one particularly good rose could be propagated from its leaves. Much interest was excited by the story of the experiment, which was yet in an incomplete shape when the 1919 Annual went to press. In a letter dated February 16, 1920, Mr. Gersdorff reports on the experiment as follows:

"Regarding my rose-leaf propagation experiment, I must report that it was a partial failure. By the latter part of March practically all of the whole leaflet and leaf-cuttings had rooted and were still green in appearance and gave every indication of success. A day or so later some mischievous boys, not of our neighborhood, undertook a bit of target practice with stones, the targets being the jars covering my cuttings. All were broken when I reached home that evening, and, though doubtful of success, I tried to save the cuttings by covering with new jars. Needless to say the experiment was thus brought to an untimely end.

"It was my intention to repeat the experiment last spring and summer but was unable to get to it, owing to the large number of gladioli I had to plant, as well as seedling Mums. If I can find the time, will try to repeat the experiment this summer."



Getting Acquainted with the National Rose Society of England.—The Honorable Secretary of the National Rose Society of England, Mr. Courtney Page, has long been a welcome correspondent with the editorial office of the American Rose Annual. An inquiry during the autumn of 1919 as to the possibility of obtaining colored lantern-slides of American roses for showing to the members of the National Rose Society, brought about the gathering of a complimentary set of such lantern-slides, which, early in December, 1919, was sent to the National Rose Society with the Christmas compliments and best wishes of the officers of the American Rose Society and many of its members.

The set included sixty-two beautifully colored slides, and a message of greeting and good wishes from President Robert Pyle. The pictures used in preparing the lantern-slides covered the M. H. Walsh roses, Hiawatha, Evangeline, Excelsa, Delight, Sweetheart, Paradise, Lady Gay, and Mrs. M. H. Walsh; Captain Thomas' wonderful rose-garden at Chestnut Hill, the rose Dr. Huey, and the new Thomas seedlings "89A" and "95C"; Climbing American Beauty, Purity, and Christine Wright, of Hoopes, Bro. & Thomas' production; General MacArthur, Mme. Butterfly, Columbia, and Premier, from E. G. Hill; Souvenir of Wootton (first Hybrid Tea raised in the United States, in 1888), Glorified La France, Radiance, and My Maryland, from John Cook; Mrs. Charles Russell, Hadley, Pilgrim, Crusader, and Wellesley, from Alexander W. Montgomery, Jr.; Dr. W. Van Fleet, American Pillar, Sir Thomas Lipton, Silver Moon, Mary Lovett, Alida Lovett, and Bess Lovett, of the Van Fleet productions; Sargent, Farquhar, Dawson, and W. C. Egan, as hybridized by the late Jackson Dawson; Gardenia, as introduced by W. A. Manda; Dorothy Perkins, of Jackson & Perkins Co.; Golden Gate, by Dingee & Conard Co.; Los Angeles, by Howard & Smith; Elizabeth Ziegler and Mrs. Charles Bell, by A. N. Pierson, Inc. There was also included a picture of Baltimore Belle, about the first notably American rose, introduced by Samuel Feast in 1843.

Views were included of the National Rose Test-Garden at Arlington; of the Public Rose-Garden at Elizabeth Park, in Hartford; of the Minneapolis Municipal Rose-Garden; and of the rose-garden of Mr. James J. Goodwin, of Hartford. Roses along the streets and a typical rose-garden came from Portland, Ore., and the Banksia rose as in the Magnolia Gardens of South Carolina was included, with a Cherokee showing from the same place. The expense of making these slides was met mostly by the subscriptions of those at interest, the general views and the transportation being a charge on the American Rose Society.



Good Fall Bloom in Auburn, N. Y.—In some sections of the United States the season of 1919 was particularly favorable toward summer rose-bloom. In the rose gardens of David M. Dunning, of Auburn, N. Y., where the forceful and active Auburn Rose Society met for their first annual garden party session, there were in bloom during the first week in September the following roses:

Betty, British Queen, Mme. Colette Martinet, Constance, Countess of Shaftesbury, Duchess of Wellington, Edward Mawley, Frau Karl Druschki,

Ethel Malcolm, George Arends, Gruss an Teplitz, Gustav Grünerwald, Harry Kirk, Hermosa, Irish Fireflame, Jonkheer J. L. Mock, Kaiserin Auguste Victoria, Königin Carola, Lady Alice Stanley, Lady Hillingdon, Lady Pirrie, Lyon Rose, Mme. Edouard Herriot, Mme. Leon Pain, Mme. Segond Weber, Marie Adelaide, Marquise de Ganay, Mary Countess of Ilchester, Mrs. Amy Hammond, Mrs. Charles Custis Harrison, Mrs. Wemyss Quin, Mrs. R. G. Sharman-Crawford, Mrs. Herbert Stevens, Mrs. A. R. Waddell, Mrs. S. T. Wright, My Maryland, Old Gold, Orleans, Pharisäer, President Vignet, Radiance, Red-Letter Day, Rodocanachi, Simplicity, Sunburst, Souvenir de la Malmaison, Willowmere.



California as a Source of Roses to Replace Holland.—The shrewd nurserymen of The Netherlands have been the main source of supply of “finished” roses in the United States for many years. As reported on page 114 of the 1919 Annual, the importations from Holland in six years averaged 1,722,531 per year to June 30, 1918. For the year ended June 30, 1919, right in the edge of the application of Quarantine No. 37, the total, as reported by the Federal Horticultural Board directly, was 126,964—less than 10 per cent of the preceding average. For the six previous years, and probably long before, Holland supplied slightly over 75 per cent of all roses imported from abroad.

Now come the California rose propagators, particularly in the vicinity of San José, with a tremendous rose effort. A careful survey of the concerns in southern California preparing to produce budded roses on Manetti stock in 1920 indicates that there are in the ground some 3,760,000 Manetti cuttings, which, if they prosper reasonably, will be fit for budding in the summer of 1920. It is probably not too much to expect from these preparations, under ordinary growing conditions, the production of as many as three millions of “finished” budded roses in California alone.

The own-root growers are not asleep. One of them is reported to have “two million cuttings very nicely rooted, in good shape for transplanting,” and another “who has usually propagated two hundred thousand has now a propagation of a million.” This takes no account of lesser units aggregating at least another half-million.

There is thus in sight the possible, and indeed probable, production of upwards of six millions of roses, mostly for the 1921 market, in California alone. Recent experiences show that solid carloads of rose plants can travel to the East in about one week’s time, with a minimum of transportation damage, so that satisfactory eastern distribution is possible.

It is known to many acquainted with horticultural commerce that California has been making attempts to supplant Holland in the production of the so-called “Dutch” bulbs. This tremendous rose-effort will show that the wonderful state of the Pacific Golden Gate is planning also to be the rose-source of America.



Who Has the Same Experience?—John Gill, a field rose-grower of West Berkeley, Calif., writes that “one variety that has proved very satisfactory to us outside for cut-flowers is Irish Elegance. It is not only a good seller, but a wonderfully free bloomer.” What has anybody else to say about this beautiful, nearly single, rose?

Mrs. Aaron Ward Reports on Willowmere Roses.—The lovely gardens of Willowmere (near Roslyn, L. I., N. Y.), in which the late Admiral Ward did such wonderful work with roses, are maintained in full order since his death, in 1918, by Mrs. Ward, whose interest has long been known to be scarcely less acute than that of her great husband. The Willowmere gardens are famous for iris, peonies, and other herbaceous plants, and the showing of early bulbs attracts attention far and wide. It is worth while to know that these displays are continued. In November, 1919, Mrs. Ward wrote thus to the Editor:

"Admiral Ward was deprived of the pleasure of seeing the result of some of his latest plantings and experiments. Possibly it might interest you to have a list of the newer comers which have done well here. Owing to the severe losses during that last cold winter of his life, he replaced quite a number of novelties which his friends kindly sent him. Some have done very well, others not, but we never decide definitely for or against under three years, wherefore the varieties I am naming hereafter may not be permanent additions to the garden. Also, others which I have not included may do better another year.

"Some of the roses I list have been here longer, but I include them because people do not seem so familiar with them and have admired them. The last few years the Admiral was collecting climbers, and some of them have been very lovely this year. In the list I have omitted well-known roses like American Pillar, Excelsa, etc.

"Our early season of bloom this year was very successful and unusually prolonged. Up to nearly the end of July we had a fine display, but after that the persistent rain and almost entire lack of sunshine until September 12, or later, prevented our usual fall bloom."

Here follows Mrs. Ward's list of commended recent roses. Unless otherwise mentioned, they are all Hybrid Teas:

Admiral Ward, Amalie de Greiff, Augustus Hartmann, Constance, Per., Duchess of Westminster, Francklin, Freifrau von der Goltz, General-Superior Arnold Janssen, Grange Colombe, Gruss an Aachen, Poly., Hugonis, Sp., Jacques Porcher, Lady Greenall, Lady Mary Ward, Lady Plymouth, T., Lillian Moore, Los Angeles, Marie Adelaide, Per., Mme. C. Chambard, Mme. Colette Martinet, Mme. Edmond Rostand, Mrs. Charles E. Allen, Mrs. Charles Bell, Mrs. Charles Hunter, Mrs. Franklin Dennison, Mrs. R. D. McClure, Mrs. MacKellar, Mrs. Wakefield Christie-Miller, Mrs. Wallace H. Rowe, Mrs. Wemyss Quinn, Primerose, Raymond, Per., Red Radiance (Gude), Red Radiance (Pierson), Sir John Duncan.

The list of climbers at Willowmere which have been found worth while follows:

Aimé Vibert, Nois.; Alberic Barbier, H.W.; Alexandre Girault, H.W.; Bagatelle, Mult.; Billard et Barre, Cl.T.; Blanche Frowein, Cl.H.T.; Bon-tigny; Christine Wright, H.W.; Danaë, Cl.H.T.; Dorothy Dennison, H.W.; Dr. W. Van Fleet, H.W.; Désiré Bergera, H.W.; Evergreen Gem, H.W.; Florence H. Veitch, H.T. (semi-climber); Francois Crousse, Cl.T.; Francois Foucard, H.W.; Fraulein Octavia Hesse, H.W.; Gainsborough, Cl.H.T.; Garisenda, H.W.; Gerbe Rose, H.W.; Jean Girin, H.W.; Lady Blanche, H.W.; Leontine Gervais, H.W.; Longwood; Mary Lovett, H.W.; Milky Way, H.W.; Minnehaha, H.W.; Mme. Auguste Nonin, H.W.; Mme. Driout, Cl.T.; Mme. Jules Gravereaux, Cl.T.; Moonlight, Cl.H.T.; Noella Nabonnand, Cl.T.; Paul's Carmine Pillar, Cl.H.T.; Paul's Scarlet Climber, H.W.; Paul Transon, H.W.; Reine Marie Henriette (old), Cl.H.T.; Mme. Sancy de Parabere, Bour-seault; Sarah Bernhardt, Cl.H.T.; Silver Moon, H.W.; The Lion, H.W.; Una, H.W.; Veilchenblau, H.W.; Wichmoss, H.W.; Zephirine Drouhin, H.Bour.

Hardy Roses in North Dakota.—The intensely rigorous climate of our Northwest does not preclude the culture of the rose. Indeed, our native roses are our best landscape material, giving us as much, if not a little more, effect for the effort expended than any other of our hardy shrubs. To our natives we can add such roses as the Rugosa and Harison's Yellow as doing well without protection. The Persian Yellow has also stood up well for a number of winters.

If we will provide winter protection in the shape of about six inches to a foot of soil covering, we can carry a bed of tender roses through winter after winter. I have carried Crimson Rambler and Climbing American Beauty successfully through winter after winter; the canes were laid flat on the ground and covered with about a foot of garden soil.

All the worth-while Hybrid Perpetuals are available, but why trouble with them at all when the splendid everblooming bedder Gruss an Teplitz blooms for us even after our first killing frosts? Underneath its coverlet of earth it will pass our severest winters unharmed, if only it has not been allowed to go into winter quarters in a dry condition.

Moss roses are hardy, and some of the old-fashioned June roses of our grandmothers' gardens once established spread almost as persistently as our native stock. Thus a rose-garden is well within the possibilities of our climate. In fact, we can have a garden that is presentable the year round by confining our planting material almost entirely to the rose family; the heps of the native roses sparkle against the snow in winter.—C. L. MELLER, Fargo, N. D.



From the Home of "La France."—In the 1919 Annual there was printed on page 88 a letter from Madame Louise Guillot, widow of Pierre Guillot, of Lyons, the distinguished French rosarian who in 1867 originated La France, the first Hybrid Tea, and yet unapproached in many respects. Madame Guillot sends a most impressive list of the roses to the credit of the great establishment, now in its third generation, over which her husband presided for nearly a half-century. It is surprising to note how many of these roses are yet in active demand. Beginning with the fine Tea rose Mme. Falcot, introduced in 1858, there followed La France, Catharine Mermet, Marie Guillot, Etoile de Lyon, Comtesse de Nadaillac, Mme. Jules Grolez, Mme. Leon Pain, Mme. P. Euler, François Crousse, Mme. Laurette Messimy, Mme. Hoste, and many others which yet hold a high place in the esteem of rose-lovers in England and America. In this extended career of rose improvement, the house of Guillot has received more than a hundred medals and other awards of merit, beginning with a gold medal conferred in 1866 for Mme. Margottin, and continuing down to recent years.

It is a significant career for the consideration of American rosarians, this one of the three generations of Guillot, the present representative of which, Marc Guillot, is following directly in the footsteps of his forebears.



A Korean Yellow Rose.—A letter from Prof. C. S. Sargent, dated March 24, 1919, contains the following:

"Wilson is back and reports having found in a Korean garden a very beautiful double-flowered yellow rose which he thinks is better than anything of the kind he has seen elsewhere, and a rose, too, which ought to be hardy here."

An Australian "Spring" Rose Show.—The National Rose Society of Victoria, New South Wales, Australia, is a live and active organization, a greeting from which was presented in the 1919 Annual. Its Secretary, George W. Walls, sends us the details of the important and successful show held on Wednesday, Nov. 5, 1919, which date corresponds, on the other side of the globe, to June with us. The exhibition was opened with an address by the Governor-General, Sir Ronald Munso Ferguson, who presented as his associate the Governor of Tasmania, Sir Francis Newdegate.

Many prizes were awarded upon a rigid scale of points for judging, which, with the rules governing the show, affords so much suggestive help that both are here reprinted:

RULES FOR JUDGING NEW SEEDLING ROSES AND SPORTS
NATIONAL ROSE SOCIETY, OF VICTORIA, NOVEMBER, 1919

1. The judges shall be nine in number, and shall be appointed by the Committee, at its first meeting. Six to form a quorum.
2. No award shall be made unless at least two-thirds of the judges present are in favor of such award.
3. No exhibitor or raiser of a new seedling rose or sport shall act as a judge, or be present during the consideration of such exhibit.
4. New seedling roses or sports may be exhibited for an award at either Spring or Autumn Shows. And notice thereof must be given to the Secretary on the morning of the show. Seedlings or sports may be judged at any other time by notifying the Secretary at least three clear days before the judging is to take place.
5. Six blooms at least of any exhibition variety, and six stems at least of any other variety, shall be exhibited for an award.
6. All roses must be judged in good daylight.
7. Exhibitors shall notify the Secretary whether the variety is a seedling or sport. If a sport, the variety from which it came should be named.
8. There shall be two grades of awards, viz: Gold Medal and Certificate of Merit, such awards to be made to the raisers only.
9. Before a Gold Medal or Certificate is finally awarded, the judges, or some person or persons appointed on their behalf, shall view the growing plant and report thereon.
10. The judges shall satisfy themselves before granting an award that the rose to be judged is entirely distinct from any other variety.
11. The granting of a Certificate does not debar any rose from being again exhibited for a higher award.
12. A seedling rose or sport may be exhibited for an award, although the variety is in commerce.
13. The judging shall be in private.
14. The judges will, as far as possible, assist the raiser to classify seedling roses and sports.

Points shall be allotted as follows in judging awards—

<i>Exhibition Roses</i>			
	Maximum Points	Minimum to Secure Gold Medal	To Secure Certificate
Color	15	12	10½
Form	15	12	10½
Substance of petal	10	8	7
Size	15	12	10½
	55	44	38½
<i>Decorative Roses</i>			
Color	15	12	10½
Substance of petal	10	8	7
Form	10	8	7
Perfume	10	8	7
Habit without support	15	12	10½
	60	48	42

Single Roses—Definition: One row of Petals

	Maximum Points	Maximum to Secure Gold Medal	To Secure Certificate
Color	15	12	10 ½
Size	10	8	7
Substance of petal	10	8	7
Form	10	8	7
Foliage	15	12	10 ½
Length of stem and habit without support	10	8	7
	70	56	49

Polyantha, Wichuraiana and Multiflora Hybrids

Color	15	12	10 ½
Form of flower and of truss	10	8	7
Number of flowers on stem	10	8	7
Habit and foliage	10	8	7
Perfume	5	2	1
	50	38	32 ½



Roses in Utah.—From some chatty and entertaining letters, written by H. P. Merry, of Salt Lake City, there are condensed the following notes:

"If we had a rose test-garden here, conducted by the American Rose Society, I believe the people of Utah and this inter-mountain region would become just as enthusiastic about the rose as those living in the eastern part of the United States.

"Through the energetic work of Sidney R. Lambourne, Superintendent of Liberty Park in this city, we have obtained a rather extensive municipal rose-garden, in which there bloom well Hadley, Richmond, Kaiserin Auguste Victoria, Lady Hillingdon, Mme. Abel Chatenay, and, of course, Gruss an Teplitz. Among the climbing roses, American Pillar does best, while Dorothy Perkins and Dr. W. Van Fleet do well.

"A visit among several of the rose-growing tradesmen here indicates that the general line of Hybrid Tea roses which you like in the East are just as good here, including also the Polyanthas."

It is not unlikely that some good forcing roses will come from Utah. Following a "tip" from E. G. Hill, who can scent a rose any number of miles, an interesting correspondence has been had with Mr. Robert Miller, of Farmington, Utah, who has produced of his own hybridization two new roses, Wasatch and Utah, but is trying them out before offering them in the market. It is apparent, not only that the Hybrid Tea roses do well in Utah, but that there is a high grade of rose appreciation available there.



A Hint from Italy.—Our Italian correspondent, who sent us last year a most interesting letter (page 85 of the 1919 Annual), in commenting on the less well-known varieties, calls attention to Zephirine Drouhin, a thornless climber illustrated last year facing page 137, of which she says that "it is an admirable rose for color, perfume, foliage and floriferousness, being good both as a bush rose or as a climber." It is classed as a Hybrid Bourbon, and was sent out in 1873 by Bizot, a French grower. Uniting "bright carmine pink" color to unusual fragrance, it would seem to merit more consideration, especially as the National Rose Society's select list recommends it as "very vigorous," as well as suitable for use as a rose for "garden, pillar, hedge, wall."

Rose Importations to June 30, 1919.—It has been a custom of the Annual to obtain accurate information as to the number and sources of rose importations into the United States. On page 114 of the 1919 issue, an official statement was presented from the Federal Horticultural Board, showing the importations for the six years ending June 30, 1918. There had been received an annual average of 2,289,382 rose plants from abroad, of which Holland supplied 1,722,531.

With the end of general rose-plant importations under Quarantine No. 37 on June 1, 1919, the quantities brought in diminish to nearly the vanishing point. Inquiry of Dr. Marlatt brought the following details, including, it will be noticed, the quantity of rose stocks admitted for propagation:

"Dear Mr. McFarland: In reply to your letter of Feb. 17, 1920, I advise you that the following quantities of roses and rose stocks were imported into the United States during the fiscal year ending June 30, 1919:

	Roses		Rose Stocks	
	Number	Per cent	Number	Per cent
England	28,048	5.6	1,149,000	38.3
France	334,961	66.5	1,378,452	45.9
Holland	126,964	25.2	256,650	8.6
Ireland	11,142	2.2	137,000	4.5
Scotland	2,779	.5	80,000	2.7
All other countries	44	.0		
Total.	503,938	100.	3,001,102	100.

Very truly yours,

C. L. MARLATT,

Chairman of Federal Horticultural Board."



Roses in New Zealand.—Inquiring as to the American Rose Society, and asking for American rose catalogues, J. B. Barr, of Christchurch, New Zealand, writes: "Now that the war is over everyone of us will surely desire to redouble our efforts to plan and beautify our gardens, and of course it is roses first, usually." Rose-love knows no geographic limitations!—THE EDITOR.



What Was the Matter with Mr. Mann's Roses?—One of the most interesting articles in the 1919 Annual was "The Making of a Rose Enthusiast and His Garden," by George R. Mann, of Little Rock, Ark. Mr. Mann, a distinguished architect, confessed his conversion from golf to roses for recreation, and promised to make accurate bloom records in 1919. His letter of August 26 explains why he could not do so:

"I am greatly disappointed, and I am afraid you will be, that I have been unable to fill out the rose cards you sent me last spring. The reason for my failure to do so is that I have had no roses this year to judge from. Last winter was very warm and the roses made a lot of growth in February. March was raw and cold, so much so that all growth on the plants was stopped. In April I got quite a lot of bloom, but it was all on short stems with but little growth beyond what was made in February. It rained practically every day in May,

and black-spot and other leaf-troubles ran rampant. Do what I could, I found it impossible to stop the trouble, and the roses lost practically all of their leaves, made no growth, many of them died, and all of them lost more or less of the main shoots. It has only been during the last month that they have shown any signs of growth, and are now making quite a bit of bloom.

"I thought at first that the trouble was caused by the fact that they had no rest last winter, but a lot of new roses from the North, planted last fall and this spring, that presumably had had a winter's rest, acted the same as my old roses, in fact 90 per cent of all the new roses died. That this condition is not local is proven by the fact that I have had letters from four southern states reciting the same conditions, and asking if I knew of any treatment that could be given them. As it is, I will be obliged to about make over my garden this fall."



Rose Potpourri.—Select petals from full-blown, sweetest-scented roses, spread on dish to dry in an airy place, and sprinkle well with salt. Stir and turn daily during a period of five days. At end of this period add the following to each pint of dry salted rose petals: One-half teaspoon ground cinnamon, one-half teaspoon ground cloves, a few dried leaves each of lemon verbena, rosemary, and lavender, and a little orris-root powder. Stir together, and set away in a sealed jar to blend and season. When ready it can be used for sachets, etc.—CHAS. E. F. GERSDORFF.



The Rose-Awakening of Rochester.—Wherever Dr. Edmund M. Mills, of Syracuse, N. Y., goes, there more roses are sure to grow, unless it is the dead of winter! (It is not recorded that the good Doctor in his enforced residence in a village above Syracuse for three days in February, when he was snowbound for that length of time, produced growing roses, but it is quite certain that he started rose-thought among the people who were so fortunate as to have him with them.)

On Feb. 20, 1920, Dr. Mills addressed a large crowd of interested persons in the Chamber of Commerce of Rochester, congratulating the Rose Society of Rochester upon reaching a membership of nearly 250 in one year. John Dunbar, the plant-loving superintendent of Highland Park, is the President of the Society, and it is to be under his chairmanship that a great rose show will be held in the June blooming-time of 1920.



Why Do Rose Seeds Germinate So Slowly?—Workers with roses know that in most cases freshly gathered and freshly sown seeds cannot be expected to germinate with any uniformity or certainty in any particular time. Dr. Van Fleet, for example, does not destroy the flats in which he may have sowed seeds of some of his own crosses for at least two years.

An amateur rose-worker, who recently visited Dr. Van Fleet, obtained considerable light on the reason for this slow germination. It is said to be "a fact that most of the seeds of the rose family are not usually fully developed when the seed-pod, or *hep*, is mature, but continue to ripen, usually for at least a year, germinating the year after planting. There are exceptions to this general observation, particularly with cultivated roses."

Here, then, is a reason for the delay experienced in securing germination.

Some Own-Root Experiences.—The question of "own-root versus grafted roses" has agitated rose enthusiasts since the day when a wild root found itself supporting the first aristocrat of the race, and, in view of the present quarantine restrictions against plant importations, it is probable that renewed interest will be aroused in the effort to decide the best method of growing roses for the American garden.

That the grafted rose usually makes rapid growth during its first season is of common knowledge, for it is already supplied with a root system in excess of its immediate requirements, and generally outstrips its own-root companion, which has to develop its means of support before it can make much progress.

Many of our roses root with difficulty, and in such cases recourse must be had to graftage if they are to be grown at all. But, with the growing list of desirable varieties which thrive on their own roots, there seems little reason to include these laggards in permanent garden plantings.

Obviously, climatic and soil conditions greatly influence growth and bloom production, and those varieties which do well in the vicinity of Philadelphia might prove unsatisfactory in other localities. A few of my own experiences and observations may, however, be of interest to others who have found delight in rose-culture.

Too much cannot be said of Radiance as an own-root subject. In my garden I have found this splendid variety more than satisfactory. No matter what weather conditions prevail, Radiance may be depended upon to produce a goodly number of blooms from early summer to late fall. Red Radiance is its counterpart in vigor and bloom-production.

Another excellent own-root rose is General-Superior Arnold Janssen. I have found it a close competitor of Radiance in the matter of growth and bloom. Its unusual color makes it a striking addition to any garden.

While Ophelia doesn't appear to produce wood so freely on its own root as when grafted; it is a reliable bloomer, even when the plant is quite small. As a garden rose it may well be recommended.

In the case of Jonkheer J. L. Mock, I have found that grafted specimens, while no more vigorous than own-root plants, are slightly more liberal in flowers. There appears to be no difference in the quality of the blooms produced.

The blooms on my own-root Hoosier Beauty plants surpass, both in quality and quantity, those on the grafted ones, and the growth is more vigorous.

An experience with garden roses, covering many years, has convinced me of the superiority of the own-root rose, and, in conclusion, I may quote from the excellent Farmers' Bulletin, "Roses for the Home," that "own-rooted plants are best for the average grower."—H. S. TILLOTSON.

[The reader is also referred to Mr. Bentz's article on page 60.—EDITOR.]



"Never Too Old To Love Roses!"—These words the Editor finds in an interesting letter from the climbing rose specialist, A. J. Fish, of New Bedford, Mass. This is a paragraph of the letter:

"I want to tell you of an incident that happened at one of the June shows last summer. A very sturdy old gentleman came to me, looking for a good climbing rose. He said he went to Florida in the winter, but always returned in time to care for his roses in the spring. I asked him his age, and he said he was only ninety-four years old. While he had a cane he did not seem to depend on it for support, so you see men are never too old to love roses when once they have grown them."

Impressions of Rose Los Angeles.—Not long since, after speaking one evening on gardening at Des Moines, Iowa, I met the owner of a fine rose-garden. To my first question to him, "Have you Los Angeles?" the reply was "Thirty-two." I could not conceal the pleasure I felt in finding this glory of a rose appreciated as it was there. Since the first plant of Los Angeles flowered with me, I have seen no other rose to compare with it in several ways:

First, in color: The glow of this rose, the suffusion of pink and yellow, producing an effect of illumination—in this respect Los Angeles is incomparable. Its color is adequately shown in the plate opposite page 37 of the *Rose Annual* for 1917, also in a color illustration in Dreer's 1920 Seed-List. A beautifully drawn study appeared in *Le Revue Horticole* soon after the Grand Prix was awarded to Los Angeles at the trials at Bagatelle, but this was unsatisfactory as to color. In the actual rose, this miracle of color persists with remarkable purity till the petals fall.

Second, in form: The charming proportions of this rose set it apart. The flat, full-petaled roundness of its cup when fully expanded gives it a decorative quality not often seen in roses. There is distinction in the flower from the day its pointed bud is formed to the moment of its first loosening petal.

Third, in foliage and habit of growth: The rich green of the leaves of Los Angeles make a fine setting for the brilliant flowers. The rose is held well up at the top of straight, stiff stems, and the dark foliage is almost of an ivy-green—a very satisfactory color.

The keeping quality of Los Angeles, when cut, is another valuable characteristic. Brought in from the garden when color first shows in the bud, it develops fast in water and holds its perfect beauty much longer than almost any other of its comrades. Its fragrance is delicious. In short, it is a rose to marvel at and to revel in.

Small wonder that American rosarians take pride in Los Angeles—that they rejoiced when the judges at Bagatelle in 1918 awarded the coveted prize of France to Messrs. Howard & Smith for this enchanting rose. Hybrid Tea though it is, it has lived through one cold and one warm winter with me in central Michigan and is as lusty as possible.

Lavender candytuft is a most lovely companion flower for this rose when cut—or the lavender statice, or such a lavender sweet pea as is that brilliant new one, Mrs. Tom Jones. It is impossible to appreciate the charm of this combination of flowers—of any one of these arrangements—until they are seen; but let me advise growing one or all of these other flower subjects as contemporaries of Los Angeles, for as delicate a harvest of beauty as can be had from any garden.—MRS. FRANCIS KING.



Preserving Cut Roses.—There are a number of chemicals which give more or less success in prolonging the life of cut roses. A little saltpeter or carbonate of soda, sprinkled in the water, generally will prolong for several days the lasting time of cut roses. Tincture of nux vomica in the water answers the same purpose. A little ammonium chloride or camphor in the water also keeps the rose petals from losing their turgidity. All these chemicals act through cell stimulation. The amount to be used depends upon the amount of water and the number of roses, and is easily established by experiment. It is worth while to use such means to prolong the enjoyment of fine flowers.—A. W. GREELEY.

An After-War English Rose-Garden.—On page 82 of the 1919 Annual were printed two letters from a great English labor leader, Mr. W. A. Appleton, Secretary of the Joint Federation of Trades Unions, which includes more than a million British union workmen. A letter dated Jan. 15, 1920, from Mr. Appleton, brings his rose-garden again before the eyes of American rose-lovers. Mr. Appleton writes:

"My garden is in a little country town; a two-story building keeps off the morning sun and some acacias interfere with the light from the south. It is not easy, therefore, to command success, but by eliminating the varieties that ball and those prone to mildew, I secure a succession of very beautiful flowers.

"Three visits to Holland and one to America limited my periods of association with my own roses, and I saw little of the autumn blooms. A wet and cold November and December prevented many buds from developing, but here and there were plants making gallant attempts to defy the elements. Gruss an Teplitz was the last to really open.

"For profusion of bloom, La Tosca comes first. She really bloomed three times and had on these occasions 108 flowers. Had the autumn been favorable, another 20 might have opened out, but we cut unopened ones on the 24th of December.

"Of the others, General MacArthur, Mrs. Amy Hammond, Mrs. A. E. Coxhead, and Gladys Harkness amongst the standards, and Maman Cochet, Melody, Florence H. Veitch, Mrs. Joseph Welch, and Ophelia of the bush variety, were most successful.

"Of those purchased in the autumn of 1918, Mrs. Mackeller, Mme. Leon Pain, Mevrouw Dora Van Tets, and Mrs. Alfred Tate showed most promise. Rayon d'Or was the greatest failure.

"This year, additions to my stock bring it to over a hundred different varieties. Hoosier Beauty, Admiral Ward, Juliet, Mrs. G. Marriott, Mrs. Ambrose Riccardo, Mrs. Bryce Allan, and others have been put in lately, and have yet to reveal their perfections or imperfections to me."



Getting the Best of Mildew and Thrip in Texas.—Prof. N. M. McGinnis, who was in charge of the test-garden of the University of Texas, at College Station in that state until the last month in 1919, writes concerning his experience in successfully combating a very bad combination—trouble with mildew and thrip. He says there was "a plat of Crimson Ramblers that were literally covered with the mildew," and refers to the fact that thrip followed mildew, and spread very fast all through the garden. "About the last of April I took off all the flowers and buds in the garden, and sprayed thoroughly with a combination of 'Sulfocide' and 'Nikoteen,' using the strengths recommended on the containers. The mildew completely disappeared, and I did not see any thrip in the garden during the spring or summer. Weather conditions preceding the spraying were very favorable for mildew development, and immediately afterward we had about two weeks of bright sunny weather." Professor McGinnis believes that the combination of these two commercial substances, one to deal with the animal and the other with the fungus, "is worth giving thorough tests."



Rose-Culture in Oregon.—Bulletin No. 58, June, 1899, of the Oregon Experiment Station, on the subject of "Rose Culture in Oregon" should prove of value to rosarians of that state.—CHAS. E. F. GERSDORFF.

Another Rose-bug Dope.—As most garden-makers know, arsenate of lead alone has never proved an efficient remedy for the rose-bug. In fact, an efficient remedy seems to have been an unknown quantity, at least up to the present time. Now we are told that a way has been found to deal with this pest, with at least a moderate degree of success. It is found in the simple plan of adding a pint of molasses to every five gallons of arsenate solution. The molasses seems to prove a bait which the bugs cannot resist, and in eating it they get enough of the poison to end their careers. It is at least a plan worth trying, and if it works, will cause a sigh of relief to emanate from the hearts of garden-makers the country over.—*Horticulture*, June 21, 1919.



Rose Thorns as Phonograph Needles.—Our active Executive Committee-man, Mr. Jesse A. Currey, of Portland, Ore., writes thus: "Marshall N. Dana, of this city, tells me that he uses the thorns of Mme. Caroline Testout rose by inserting in them the usual phonograph needle so as to give him something he can fasten in the needle-holder. When this mounted thorn is put on the disc there results, he declares, soft, sweet tones." Who can now say that there is not a use for rose thorns?



What Roses Do You Give Away?—Mrs. Francis King, author of "The Well-Considered Garden," and doer of many good things in gardens and outside of gardens, sends for the 1920 Annual this little note which she found in the London *Garden* recently.

"When you cut roses to give away, you cannot go wrong if you select those you would prefer to keep, though this is a counsel of perfection and too Christian for general practice.—SOMERS."



The Hardiness of Paul's Carmine Pillar Rose.—In a letter saying she "cannot get along without" the American Rose Annual because "there is nothing else that contains the same up-to-date information," Miss Annie Lorenz, of Hartford, Conn., adds several interesting items of rose information. She says:

"Somebody ought to put a note in the next Annual about Paul's Carmine Pillar, which is not nearly as well known as it deserves to be. People think it is tender, but my big one came through the awful winter of 1917-18, in a rather exposed situation, without requiring more than its ordinary pruning, and that was not of wood killed by the cold. During the same winter, Dorothy Perkins was killed back entirely, the trouble probably being with the lady that she stood in a too sheltered situation and had not stopped growing in the fall so that the late wood was not properly hardened.

"Incidentally, what is there in the lineage of Dorothy Perkins that makes it root so much more easily than anything else? You have only to stick a piece in the ground in a damp place any time in the season, and it will grow. It is better to put it root-end up, but it doesn't matter much."

Both of these items are important. What Miss Lorenz writes about the easy-rooting quality of Dorothy Perkins points to the desirability of experiment and study as to the use of this and other climbing roses as stocks upon which to bud Hybrid Tea roses. It may be that the same sort of treatment proposed on page 40 of the 1919 Annual for *Rosa odorata*, Form 22449, could be applied with equal success to Dorothy Perkins.

The Rose-Zone Map.—The map on page 76 has been prepared in the Bureau of Plant Industry of the Department of Agriculture, from the Atlas of American Agriculture. Dr. W. M. Taylor, Chief of the Bureau, has been interested in this attempt to aid in determining safe areas for roses, and Prof. L. C. Corbett, of the same Bureau, has given the map his best attention. Our rose friend, Dr. W. Van Fleet, Plant Physiologist of the Bureau, has worked in locating the zones with F. L. Mulford, Horticulturist, who writes thus of the basis of the work:

"The lines of this map have been based upon the Weather Bureau record during the time that the various stations have been established. The area indicated by horizontal lines covers the region where the average date of the last frost is in March, and where tender roses would find no frost danger. The stippled area is where the last frost comes in April, while the clear area has frosts in May. The areas marked by the vertical lines have more or less frost during the so-called summer months, or extreme winter temperatures, or both. The lines between the different areas as a rule rather closely follow these frost lines, although at some of the river valleys there have been rather decided prolongations of these later frost dates northward from the general area, and these have been eliminated from the map because those regions are so narrow, and the limitations of them were such that we felt it would be more misleading to include them than to eliminate them. The same holds true with respect to some of the variations in the Rocky Mountain region. We have tried in every case to make the lines on the safe side. In other words, there are points beyond the places indicated where the more tender varieties of roses may succeed. As an example of what I mean: There is an area of earlier frost dates on the western shore of Lake Michigan, extending to the Wisconsin line, or beyond, but it seemed wise to us to make the limit of the Hybrid Teas about Chicago instead of extending the area up along the Lake shore in that particular region."

This map is now published for the first time, and it is to be understood as tentative only in its determinations. Criticisms are invited, for the purpose of perfecting the work. Other factors of rose success in addition to frost will have consideration as data are accumulated.



Specializing in Watering.—The Viscountess of Enfield, a rose of surpassing beauty in bloom, requires a special bed* for best results. It must be watered with discriminating frugality. A degree of watering under which most other roses thrive is fatal to success with the Enfield. The buds ball and refuse to open; the leaves yellow and fall rapidly. The amount of water needed must be a matter of individual experiment. Excess so lowers the vitality of this rose that it is an easy prey to black-spot and other fungous diseases.—A. W. GREELEY.



A New European Red Rose.—Under date of Jan. 14, 1920, the head of the great rose firm of Ketten Frères, in the Grand Duchy of Luxembourg, writes that that concern has "succeeded in raising a fine red rose, a cross of *Farbenkönigin* and *Ruhm der Gartenwelt*, which has already won several prizes and a gold medal, and which will be named after one of the founders of our firm." This rose is, presumably, to be distributed in the autumn of 1920.

*By a "special" bed Mr. Greeley means a rose-planting soil made up of various layers, according to the method of the late F. W. Taylor. Such beds are about three feet in depth.—EDITOR.

How To Prepare a Rose-Jar.—Spread out rose petals—a lot of them—on a piece of clean white paper and permit them to dry in the open air, but not in the direct sun, which would melt the oil in the petals. When well dried, “salt down” the petals, using the finest table salt which has been previously dried in the oven and rolled out free from lumps. Put in a rose-jar a layer of rose petals, and then a sprinkle of salt from a coarse shaker, adding layers of rose petals and salt until the jar is full. The purpose of the salt is to absorb any moisture that may not have dried out.

After a week or so, the petals may be taken out and the excess salt shaken off. To six quarts of dried petals use one-fourth ounce each of coarsely ground mace, cloves, cinnamon, and allspice; one ounce of gum benzoin, pounded to a coarse powder; one ounce chipped orris root; one-half ounce ground sandalwood; a teaspoon each of ground orange and lemon peel; and one-half ounce of powdered gum myrrh. Mix all together thoroughly and you are ready to pack in the rose-jar.

In the bottom of the jar put ten drops of oil of rose and a grain of musk; then fill the jar with the prepared mixture. When the jar is closely packed, cover tightly and leave unopened for three months, so that the perfumes may be well blended. This is an excellent, lasting, and agreeable rose perfume when carefully prepared.—MRS. EMMA LESTER, Ensenore, N. Y.



Another Northwestern Rose Society.—James A. Hays, the rose live wire of the Tacoma Rose Society, in the “rosy” state of Washington, sends to Secretary White on Feb. 5, 1920, “a list of seventy-six associate members from the Tacoma Rose Society for membership in the American Rose Society.” Mr. Hays is scolding himself because he hadn’t quite succeeded in sending a hundred members. He promises us for next year an account of the rose-garden in Point Defiance Park, of Tacoma. Other states might well take notice of the extraordinary situation in the Pacific Northwest, where roses really count.



Does the Leopard Change His Spots?—This zoölogical question may be hard to answer, but it seems to be quite certain that roses change their color. These words are written during the glorious bloom period of the climbing roses in 1919, when Tausendschön is no longer “Thousand Beauties,” but one vast billowy mass of almost pure white flowers, with only an occasional hint of pink in a shy cluster or a single bloom.

Nearby are several plants of Mrs. F. W. Flight, a cluster climber of the same type as Tausendschön, heretofore remarkable for the even, rich pink with which it wholly covers itself in the bloom period, remaining in good order for several weeks. Mrs. Flight has this year, however, changed her garb, and every cluster has in it flowers from almost white to a deeper pink than usual, with variations in between. The appearance is almost that of Tausendschön at its normal best.

Just what produces this change does not seem to be even hinted at by rose experts. The early growing season of 1919 was cool and wet, but the conditions at bloom-time have been practically normal.

A plant of Baroness von Ittersum, expected to be of the brightest red in flower, showed this season only a rather pale pink. Similarly, Aunt Harriet, a new climber of which flowers heretofore have been of unsurpassed brilliance, was washed out in color until the very last flowers, which are all right.

What is it that changes the color in climbing roses?—J. H. McF.

The High Cost of Roses in England.—Elsewhere in this Annual will be found discussion of the present rose prices which will be rather generally blamed on the exclusion order of the Federal Horticultural Board under Quarantine No. 37. A letter from Mr. W. A. Appleton, an English labor leader, who is a rose-lover, seems to give a different angle to the situation. Under date of Jan. 15, 1920, Mr. Appleton, in a letter of which a part is printed elsewhere, writes as follows:

"The war interfered very badly with the English rose-growers. Their laborers were taken for the army and their land for potatoes. Railway troubles have added freightage charges and transport difficulties, and today bushes have trebled in price while standards are unobtainable even at greatly enhanced prices. 'Five shillings each, my selection,' is the notice in the few catalogues that come to hand. What one wants appears not to exist; what one gets seldom carries more than one bud and the lowest price is 5s. The old catalogues you have will tell you that in pre-war days good standards of stock varieties could be purchased at 2s. each.

"Fortunately, there are signs of recovery, and though catalogues are as difficult to obtain as earlier editions of Shakespeare, owing to very greatly enhanced printing charges, nurserymen are advising their customers of possibilities for the latter part of 1920."

It is obvious that American rose-growers are fortunate both in price and in supply, for the most part.



Standard Roses in America.—A memorandum reaches the Editor to the effect that Mrs. Harriet R. Foote, of Marblehead, Mass., who not only lays out rose-gardens but carefully tests roses, is doing some special investigation in respect to the best way to produce standard roses in America. In a letter to the Editor she says, concerning both standard and bush roses, "I have grown them on a different stock than the one used in this country, and until I have tried out some of the American-grown roses I fear my advice would not be very valuable. I am feeling around now in the dark, as it were, in a new field, and I must make a number of experiments before I shall feel I am in a position to speak with authority on American-grown roses, either bush or standard, which, so far as I have tested them in my own work, have not been a success. I hope for better results in the future, and am sending around to different parts of the country in the endeavor to find some that can in any way compete with the English, Irish, French, and German roses I have used in the last twenty years."

This is just another item in the American rose advance, for when an American rose-grower wants any particular thing hard enough he (or she!) usually gets it.—THE EDITOR.



Candied Rose Petals.—Detach petals from fresh, full-blown, fragrant roses and lay on dishes for about an hour to dry, but not to wither. Make a syrup of a half pound of sugar, and less than half a pint of water, boiled till it spins a thread. Set on ice to cool, and when the syrup begins to crystallize, the petals, a few at a time, are dipped in with a pair of wire tongs, then taken out and spread on oiled paper. When they begin to dry or harden, they are to be dusted heavily with powdered sugar on one side and then on the other.

CHAS. E. F. GERSDORFF.

Pruning Conard F. Meyer, a Rugosa Hybrid.—I know of no rose which offers more difficulties in removing all dead wood than the Meyer, on account of the large number of very strong, sharp thorns. Based on experience so far, I believe the removal of the old canes is often not necessary, or even desirable, until they are two years or more old. The new main canes are liable to bloom more freely at the terminal, whereas in their second year they put out comparatively short bloom shoots, which is a good feature as it tends to insure a more general distribution of the bloom.

Neither have I resorted to any extensive winter pruning of the laterals, though the distribution of the bloom can be controlled in large measure in this way. During the summer, laterals measuring from 18 inches to 3 feet are put out by some of the canes and I generally shorten or remove these where the growth is too thick, and in other places simply tie them down along the arch rods, or cross them at the top of the arch to distribute the bloom over the horizontal or roof section of the arch structure.*—W. C. SPRUANCE, Wilmington, Del.



Getting Definite Value from Rose-bloom Records.—The members of the American Rose Society have made it plain that they want to know more and more about the behavior in detail of the various roses they have invitation to buy. It is in order to provide a plan for making records of such uniformity and comprehensiveness that they will give definite information rather than irregular inferences, that J. A. Currey, of Portland, Ore., has worked out a plan which is earnestly commended to those observers who will do real work. Mr. Currey writes:

"The value of rose-bloom records consists primarily in the establishment of standards relating to rose-bloom. From these standards the rose-grower can determine, by comparison, whether or not his roses are giving him the amount and quality of bloom that reasonably may be expected under average cultural conditions. Such standards, likewise, are of great value in the selection of new plants for the old garden, or for the planning of a new garden.

"To be of value in establishing standards, the various bloom-counts made by members of the American Rose Society should be themselves standardized and so systematized as to include all data necessary to accurate analysis, deduction and generalization. Bloom-counts that leave cultural and other factors unknown are virtually valueless for purposes of comparison.

"It is suggested that all bloom-records presented for publication in the American Rose Annual should include the following data:

"*Soil Relation:* General character of garden soil—Standard rose-bed (as established in Thomas' 'The Practical Book of Outdoor Rose-Growing')—Special rose-bed.

"*Stock:* Own roots—Budded (Indicate whether on Multiflora, Briar, Manetti, Canina, Rugosa, etc.).

"*Age of Rose Plants Reported Upon:*

"*Cultural Relation:* Fertilization (Kind of fertilizer, Amount per plant, How often applied)—Working rose-bed (how often)—Irrigation (how often)—Summer mulching—Winter protection—Pruning (Indicate to how many eyes as a general rule) H.P.—; H.T.—; Teas—; Per.—. —Disbudding (indicate what general rule is followed, variations from which may be indicated by asterisk or figures.) (To obtain quality bloom, disbudding should be to one bloom to a stem, which for ordinary purposes should be at least 12 inches long.)

"*Bloom-Count.* As a general rule, all counts should be made at time of cutting the mature bud. Variations from this practice should be indicated. (In the case of Tepplitz and other strictly garden decorative roses, count of mature bloom is permitted.)"

*See "A Better Way to Use Hybrid Rugosas," on page 147.—EDITOR.

The Story of One Rose.—"There is an incident that occurred here that you in particular might be interested in. In the rear of the hospital which before the invasion was a Belgian convent, is a German graveyard containing some thousand graves. On one of the graves was blooming almost the only flower I have seen so far in Belgium—a large, perfect La France rose. I picked the rose and brought it into our ward. Never in my life have I been so struck with the symbolism of an act as I was with this. This convent is almost a wreck; the town is a wreck; parts of it are in such condition that the written word will never portray actual conditions; yet in the midst of universal wreck was introduced one single, perfect rose—a most beautiful flower it was—which to me stood for and symbolized all that we were over here fighting for; conditions of life in this world that would allow civilization to come into perfect bloom and for the elimination of the blight in civilization which was blasting the life and hope of all human life on this world. And the symbolism was more finely and deeply drawn, too, for the symbol itself was cut from over the grave of a German. Likewise the perfect flower of Peace will and can only be picked from the grave of the Prussian military system of government. The flower of Peace picked from anywhere else will never be perfect, for future generations will find it blighted and dwarfed, and withering in their hands." (Excerpt from a letter written by Carl Grant Wilson, Co. D, 112th Eng., U. S. A., to his mother Mrs. Ella Grant Wilson, Oct. 26, 1918.)—*Florists' Exchange*, Jan. 11, 1919.



Rose Beads.—Use petals from the most fragrant roses while still fresh. Pass them through a meat chopper, using the finest cutter, every day for a period of five days, letting them stand in a covered iron vessel after each grinding. The iron of the vessel turns the ground petals black. When they have been reduced to a dark paste, molding can be started. Take a small portion of the paste and roll it into a bead in the palm of your hand; they can be made any size and shape and can be ornamented in various ways, such as indenting the sides, making impressions with the end of cloves, etc. Stick a pin through each bead as it is finished and pin to a board to dry and harden. When hard, remove the pins and beads are then ready for stringing into necklaces. When molding the beads the paste will stain the hands. This can be removed by washing in water *without* soap.—CHAS. E. F. GERSDORFF.



Long-stemmed Roses.—The secret of producing long-stemmed roses lies partly in the variety planted, but mainly in the treatment accorded them after planting.

A well prepared, deep, rich and porous soil is the first essential. When the plants are growing freely, they should be severely pruned so as to produce strong, vigorous new shoots, terminating in fine, perfect roses. As a further encouragement to strong and quick growth after pruning, a weekly or semi-weekly application of liquid manure is essential. When buds are formed on the new branches, disbudding should be resorted to, if necessary, so that only one blossom develops on that branch, into a handsome, perfect rose. If the bud or buds are pinched out while still young, a new shoot will start growing from the end. This will tend to increase the length of the stem. When cutting the rose, cut back to main branch each time, giving thus a long stem, and making further pruning unnecessary.—CHAS. E. F. GERSDORFF.

Where Roses Produce Food.—One of the commodities aiding in the return of at least one belligerent nation to a peace-time basis is the rose. Bulgaria is negotiating now for an exchange of rose-oil, or attar of roses, for wheat to relieve the food situation in that country. The Bulgarian government controls the export stocks and has fixed a price of \$17.50 an ounce for this commodity. It has also sent Zlatan Getchcoff, a member of its Food Administration, to work out the details of the exchange on the above basis.

The whole proposition is highly interesting. The great bulk of the Bulgarian rose-oil is distilled in small quantities by individual peasants. The crop season is short, and a tremendous quantity of roses must be handled to produce even a small amount of the oil. There are, of course, large companies doing this work on a much larger scale, but even these are glad to purchase the product of the peasants. The normal crop is from 35,000 to 40,000 kilos. The war has played havoc with the industry, however, and the probabilities are that the oil now available will be about one-half that amount. A still greater decrease may be experienced, it is stated, if conditions during the distilling season last month were the same in Bulgaria as in France, where the crop proved very poor.

The importance of this industry is further manifested by the organization of the Bank of Roses in Sofia. This is to be a banking and trading institution with a capital of 4,000,000 francs. One-fourth of this amount has been subscribed by Bulgarian rose-growers, the balance coming from outside investors.—*Florists' Exchange*, August 9, 1919.



The "Northern Cherokee Rose."—Referring to W. C. Egan's article in the *American Rose Annual* of 1919, the rose he mentions may be obtained from Bobbink & Atkins, Rutherford, N. J., under the name *Rosa spinosissima altaica*.

CHAS. E. F. GERSDORFF.



How To Make Rose-Water.—Fill an aluminum tea-kettle half full, or a little more, of clear water; strew fresh rose petals from the most fragrant roses, thickly over the surface. Close kettle tightly, and set on frame over a lighted spirit lamp. The heat will extract the essence of the rose petals, which will vaporize and be carried off with the steam generated by the water. This mixture of steam and rose-vapor is to be carried off through a rubber hose attached to the spout of the tea-kettle, the other end of which enters into a glass jar on the floor. Part of the rubber hose is so arranged that it can be submerged in a pan of cold water. The vapors, on passing through that part of the rubber hose which is under water, are condensed and run into the glass jar in the form of rose-water. It is then ready for use.—CHAS. E. F. GERSDORFF.

SEND IN ROSE NOTES

Members of the American Rose Society are asked to send the Editor items of rose-lore or rose-gossip for the 1921 Rose Notes. Help along the good work!

The Work of the American Rose Society

A CONDENSED SUMMARY

IN VIEW of the pressure of important rose-progress matter needing to be published in the 1920 Annual, the officers of the Society have agreed to omit from the Annual the usual full reports, as well as the list of members, sending separately to each member these items in a pamphlet uniform in size with this book.

For rules, medal details, regulations, etc., and for the list of members, reference may be made to the "1920 Annual Report of the American Rose Society." There follows a brief summary of activities, and the complete list of roses registered since the publication of the 1919 Annual.

OFFICERS AND MEETINGS

The officers elected April 2, 1919, are listed on page 4 of this Annual. The twentieth annual meeting occurred in New York, on April 2, 1919, and an informal meeting was held in Washington on June 3, 1919, in connection with the annual inspection of the Arlington (Washington) Rose Test-Garden.

The Treasurer's report for the year ended April 1, 1919, showed total receipts of \$5,257.90 and total disbursements of \$3,120.32, with a cash balance of current funds amounting to \$2,137.58. The Treasurer also holds interest-bearing certificates to the amount of \$3,000, the Hubbard Medal Fund of \$250, and \$500 of life-membership receipts awaiting investment. The Society had thus, on April 1, 1919, total net cash resources of \$5,887.58.

The Secretary reports 1,753 paid memberships to Dec. 31, 1919.

The Executive Committee has held six meetings since the publication of the 1919 Annual, with an average attendance of nine members. Much important constructive work has been accomplished at these meetings, details of which are available in the 1920 Annual Report above referred to.

New Roses Registered in 1919

From James H. Bowditch, Pomfret Center, Conn., April 20, 1919:

Rosa hybrida, *Max Graf*. Probably *Rosa rugosa* × *R. setigera*. Single, bright pink flowers with golden centers, resembling *R. rugosa* in petalage. The plants are free growers, profuse bloomers, exceptionally hardy, and of bushy climbing habit. The rose differs from *R. rugosa* and *R. setigera* in that it rarely produces seed, has superior glossy foliage resembling that of *R. rugosa* and seldom attacked by insects, remaining attractive all season. Excellent for planting in mass effects or as a pillar rose.

From John H. Dunlop, Richmond Hill, Ontario, Canada, March 11, 1919:

Frank W. Dunlop. H.T. Seedling of Mrs. George Shawyer × Mrs. Charles Russell. The solid, high-built buds open into large, lasting, rose-pink flowers

having 45 well-reflexed petals and a strong fragrance. It is a strong, vigorous, grower and free bloomer, with glossy dark green foliage that is free from black-spot.

From John Cook, Baltimore, Md., June 30, 1919.

Mrs. Sterling. H.T. Antoine Rivoire × unnamed pink seedling. A strong, vigorous, hardy plant, producing a profusion of large, full, clear rose-pink, fragrant flowers of good substance and very lasting.

Glorified La France. H.T. Frau Karl Druschki × Mrs. Charles Russell. An extra-strong grower but not very hardy, and just about medium in freedom of blooming qualities. The flowers resemble those of La France but are much larger, deeper pink, and have very long stems. The blooms are fragrant, very lasting, and are unusually full and heavy as to petalage.

Pink Beauty. H.T. Ophelia × My Maryland. The long-pointed flowers are of medium size, clear pink, fragrant, and very lasting. A strong, vigorous-growing, hardy plant with thick foliage; very free-blooming.

Mrs. John Cook. H.T. Ophelia × three unnamed seedlings. Large, deep cup-shaped, but long-pointed flowers of white suffused with delicate pink; fragrant; petals large and waxy; very lasting. An unusually strong grower and free bloomer, with large, leathery foliage.

Panama. H.T. Frau Karl Druschki × unnamed pink seedling. Bud long, pointed; flower medium double, large, silvery pink, cup-shaped, fragrant, and lasting. A free bloomer of vigorous growth, with heavy foliage; very hardy.

From Robert Scott & Sons, Inc., Sharon Hill, Pa., July 10, 1919:

Cornelia. H.T. Ophelia × Mrs. Aaron Ward. This rose is similar to both parents but superior in color, being light flesh on the outer petals, deepening to Malmaison-pink at the center, with base bright orange—the best of its color to date. The buds are like those of Mrs. Aaron Ward, and the very double, medium to large flowers are well-formed, fragrant, and very lasting. It is a strong, vigorous grower with foliage like Mrs. Aaron Ward, and produces a profusion of blooms. Its hardiness has not been tested. Will be commercially valuable as a bud, half-expanded flower, and when full blown.

From the Montgomery Co., Inc., Hadley, Mass., September 19, 1919:

Crusader. H.T. Montgomery seedling. A vigorous grower, bearing an abundance of ovoid buds which open into large, full (65 petals), globular, crimson-red flowers having high centers and moderate fragrance; a good keeper. Large, dark green foliage. A distinct rose.

Pilgrim. H.T. Montgomery seedling. A distinct, two-toned pink rose having long-pointed buds and large, full, fragrant flowers that are splendid keepers. The perfectly imbricated petals are silvery pink, with deep rose-pink reverse, and number about 40. It is a vigorous grower and a free bloomer with large, normal green foliage.

From Clarke Bros., Portland, Ore., September 22, 1919:

Felicity. H.T. Ophelia × Hoosier Beauty. A very free-flowering variety which produced 155 blooms outdoors and varied in petalage from 52 early in the season to 61 in September. The buds are long-pointed and the flowers large, very fragrant, rose-pink, with a silvery suffusion. It is of upright strong-branching habit with dark green foliage.

Mrs. Walter T. Sumner. H.T. Ophelia × Hadley. The large, semi-single flowers, sometimes measuring 5 inches in diameter and varying from 12 to 18 petals, are produced in clusters of 5 to 10, and are very fragrant. The long-

pointed buds open quickly, but the petals hold well on the fully opened flowers and are a lovely carmine, shading to deep rose-pink. The upright bushes are clothed with dark green foliage and produce 115 blooms outdoors.

From Capt. George C. Thomas, Jr., Chestnut Hill, Philadelphia, Pa., January 20, 1920:

Doctor Huey. H.W. Ethel \times Gruss an Teplitz. A free-flowering climber having large, lasting, semi-double, dark carmine flowers and good foliage. A free-growing, hardy variety.

Bloomfield Progress. H.T. Mary, Countess of Ilchester \times General MacArthur. A strong-growing, bushy plant with very lasting, double (over 50 petals), red flowers having strong fragrance. This rose is similar to General MacArthur, but differs in habit, size, and form of flower, being superior in that it holds the center better and is larger in hot weather.

Bloomfield Abundance. H.T. Sylvia \times Dorothy Page-Roberts. A bushy plant 3 to 6 feet high, with glossy, dark green foliage that is not susceptible to mildew. The double flowers are salmon-pink and are produced singly and in sprays. This rose is similar to Cecile Brunner, but is hardier and the blooms are larger.

Bloomfield Perpetual. H.P. Iceberg \times Frau Karl Druschki. A very free-flowering variety with good keeping qualities. It grows 3 to 5 feet high and has good green foliage. The single white flowers resemble those of the Cherokee, but it differs in habit, being bushy. It is hardy in Philadelphia and blooms until November.

From Frederick R. M. Undritz, West New Brighton, Staten Island, N. Y., February 23, 1920:

Silver Star. H.W. Silver Moon \times Marie Van Houtte. The pointed yellow buds open into large (22 petals), semi-double, cream-white flowers having a mass of golden yellow stamens; quite fragrant. It is bushy in habit, with a climbing tendency and the foliage resembles that of Silver Moon. An ever-blooming rose with excellent lasting qualities and bearing its flowers until October. It is very vigorous, hardy, and disease resistant.

From Frederick R. M. Undritz, West New Brighton, Staten Island, N. Y., Jan. 12, 1920:

Gen. John Pershing. H.W. This climbing rose was registered August 23, 1917, as Frederick R. M. Undritz. By consent of the Executive Committee, upon due publication, and after inquiry of the English and French National Societies as to a prior use of the name, the name is now changed as noted. The rose was not formally in commerce.

Medals Awarded in 1919

Gold Medal—

The Mrs. Gertrude M. Hubbard Gold Medal was awarded to E. G. Hill Co., Richmond, Ind., for Columbia.

Silver Medal—

E. B. Van Wagenen, Syracuse Rose Society, for best collection of garden roses.

Bronze Medals—

Mrs. L. M. Gallivin, Syracuse Rose Society, collection of garden roses.
Edith Eggleston, Syracuse Rose Society, collection of garden roses.

A List of Roses Introduced in America

Compiled by CHARLES E. F. GERSDORFF

(Corrected in this Fifth Edition to March 17, 1920)

EDITOR'S NOTE.—No feature of the successive issues of the American Rose Annual has been of more substantial importance or benefit than the list which follows, no longer called "A *Partial List*." When first put together in 1916 it was more nearly a bare hint of the roses introduced in America. The unremitting and continuous efforts of Mr. Gersdorff have resulted in giving it a completeness and an authority of accuracy quite unusual.

The publication of this list serves as notice in respect of names attached to roses of American origin. Duplications in later introduced varieties are inadmissible, and the American Rose Society will not register any such duplications.

The Editor will be glad to transmit to Mr. Gersdorff any corrections or additions which will tend to make this list more complete. The makers of catalogues are urged to accept the nomenclature here presented as authoritative and accurate.

ABBREVIATIONS

The abbreviations used are: B. (Bourbon), B.-C. (Bourbon-China), Ben. (Bengal), Ben.-C. (Bengal-China), C. (China), Cl.B. (Climbing Bourbon), Cl. H.T. (Climbing Hybrid Tea), Cl. T. (Climbing Tea), D. (Damask), H. Ben.-T. (Hybrid Bengal-Tea), H.Cl. (Hardy Climber), H.D. (Hybrid Damask), H.Mult. (Hybrid Multiflora), H.N. (Hybrid Noisette), H.P. (Hybrid Perpetual), H. Ramb. (Hybrid Rambler), H. Ru. (Hybrid Rugosa), H.T. (Hybrid Tea), H. T.-Poly. (Hybrid Tea-Polyantha), H.W. (Hybrid Wichuraiana), H.W.-Ru. (Hybrid Wichuraiana-Rugosa), Læv. (Lævigata), Mult. (Multiflora), N. (Noisette), Per (Pernetiana), Poly. (Polyantha), H. Poly.-Ayr. (Hybrid Polyantha-Ayrshire), Ramb. (Rambler), Semp. (Semperflorens), Set. (Setigera), T. (Tea), W. (Wichuraiana), A. R. S. (American Rose Society).

LIST OF WORKS CONSULTED

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 Société Nationale d'Horticulture de France, Section des Roses, etc. 1912.
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31. Eastern Nurseries, Inc., Holliston, Mass., 1918
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36. *Plantæ Wilsonianæ*, Arnold Arboretum, Vol. II, Part II, 1915.
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38. Bulletin American Rose Society, 1907.
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- ABUNDANCE, Poly. (Henderson, 1910.) Clotilde Soupert \times Souv. du President Carnot. 25.
- ADMIRAL DEWEY, H.T. (Taylor, 1899.) Sport from Mme. Caroline Testout. 15, 19.
- ADMIRAL EVANS, H.T. (E. G. Hill Co., 1907; not formally introduced.) 5, 13. Liberty \times unnamed seedling. 12.
- ADMIRAL SCHLEY, H.T. (J. Cook, 1901.) Colonel Joffe \times General Jacqueminot. Received Bronze Medal at Pan-American Exposition. 19.
- AGNES EMILY CARMAN, H. Ru. (Carman, 189-.) *R. rugosa* \times Harison's Yellow. 29.
- ALBA RUBRIFOLIA, H.W. (Van Fleet, 1898; intro. by Conard & Jones Co.) *Wichuraiana* hybrid.
- ALICE ALDRICH, H. Ru. (J. T. Lovett, 1899.) 15. *R. rugosa* \times unknown Tea or Hybrid Tea.
- ALICE LEMON, H.T. (E. G. Hill Co., 1911.) Mme. Philippe Rivoire \times Paul Neyron. 25.
- ALIDA LOVETT, H.W. (Van Fleet, 1905; intro. by J. T. Lovett, 1917.) *H. Wichuraiana* \times Souv. du President Carnot. 15.
- ALICE OF INGLESIDE, H.T. (Briggs, 1910.) 42.
- AMERICA, H.Cl. (Walsh, 1915.) 29.
- AMERICA, N. (Page, 1859.) Large, fine flower of creamy white. 8, 16.
- AMERICA, H. Ru. (Garden, Harvard University, 1894.) 5.
- AMERICAN BANNER, T. (Cartwright, 1879.) 1, 17. Sport of Bon Silene. 16.
- AMERICAN BEAUTY, H.P. (Bancroft, 1886.) Syn., Mme. Ferd. Jamain, as which it seems to have been introduced in France by Ledéchaux, 1873. 3, 17, 19. (Field Brothers.) 16.
- AMERICAN BELLE, H.P. (J. Burton, 1893.) Sport from American Beauty. 19.
- AMERICAN PILLAR, H.W. (Van Fleet, 1902; intro. by Conard & Jones Co.) *R. Wichuraiana* \times *R. setigera*. 19.
- AMCENA, Læv. (Hockbridge, 1909.) 15.
- ANNA MARIA, Set. (Feast, 1843.) 1, 13, 19. Syn., Anna Marie. 15.
- ANNIE COOK, T. (J. Cook, 1888.) 1. Seedling from Bon Silene. 17.
- APPLE BLOSSOM, H.Cl. (Dawson 189-; not formally introduced.) 29. Dawson \times *R. Multiflora*, 31.
- APPLE BLOSSOM, Poly. (Schultheis, 1908.) 26.
- ARCADIA, H.W. (Walsh, 1913.) 15.
- ARNOLDIANA, H. Ru. (Dawson, 1914.) *R. rugosa* \times General Jacqueminot. Syns., Arnold; Dawson's Hybrid *Rugosa*.
- ATLAS, H.T. (E. G. Hill Co., 1903.) 19.
- AUGUSTA, N. (1853.) Sulphur. 1. Seedling from Solfatare. 8.
- AUGUSTINE GUINOISSEAU, JR., H.T. (California Rose Co., 1911.) Sport of Augustine Guinoisseau. 15, 30.
- AUNT HARRIET, H. W. (Van Fleet, —; intro. by *Farm Journal* of Philadelphia, 1918.) Appoline \times *R. Wichuraiana*. 15.

- BABETTE, H.Cl. (Walsh, 1908.) 15, 19.
- BALTIMORE, H.T. (John Cook, 1898.) Mme. Antoine Rivoire × Mary Fitzwilliam. 42.
- BALTIMORE BELLE, Set. (Feast, 1843.) 10, 19.
- BEACON BELLE, H.Poly.-Ayr. (R. & J. Farquhar & Co., 1919.) Orleans × Katharina Zeimet × an old Ayrshire rose). 33.
- BEAUTY OF GREENMONT, H. Set. (Pentland of Baltimore, 1854.) 16.
- BEAUTY OF GREENWOOD. N. 17.
- BEAUTY OF ROSEMAWR, B. (Conard & Jones Co., 1903.) 15, 19.
- BEAUTY OF THE PRAIRIES, Set. (Feast, 1843.) 13, 19. Syns., Queen of the Prairies, Prairie Queen, 10; Feast's No. 1, Mme. Caradori Allan, 22.
- BEDFORD BELLE, H.T. (Bedford Flower Co., reg. 1916.) 15. Sport from Double White Killarney.
- BELLE AMERICAINE, H.P. (D. Boll, 1837.) 1, 16, 17.
- BELLE PORTUGAISE, Hybrid (?). (Franceschi, ———.) *R. moschata* × *R. odorata gigantea*. 34.
- BESS LOVETT, H. W. (Van Fleet, 1905; intro. by J. T. Lovett, 1917.) 15.
- BETTY ALDEN, H. Poly.-Ayr. (R. & J. Farquhar & Co., 1919.) Orleans × Katharina Zeimet × an old Ayrshire rose.) 33.
- BIRDIE BLYE, H.Cl. (Van Fleet, 1904; intro. by Conard & Jones Co.) Helene × Bon Silene. 19.
- BLOOMFIELD ABUNDANCE, H.T. (Capt. George C. Thomas, Jr., reg. A. R. S., 1920; intro. by Bobbink & Atkins and A. N. Pierson, Inc., 1920.) Sylvia × Dorothy Page-Roberts. 15.
- BLOOMFIELD PERPETUAL, H.P. (Capt. George C. Thomas, Jr., reg. A. R. S., 1920; intro. by Bobbink & Atkins, 1920.) Iceberg × Frau Karl Druschki. 15.
- BLOOMFIELD PROGRESS, H.T. (Capt. George C. Thomas, Jr., reg. A. R. S., 1920; intro. by Bobbink & Atkins, 1920.) Mary, Countess of Ilchester × General MacArthur.
- BLUSH MARYLAND, H.T. (Totty, 1912.) Sport. 15.
- BONNIE BELLE, H.Cl. (Walsh.)
- BONNIE PRINCE, H. W. (Thomas N. Cook, reg. A. R. S., 1918.) Tausendschön × unnamed seedling.
- BOSTON, H.T. (Montgomery Co., reg. A. R. S., 1917.) Mrs. Geo. Shawyer × Montgomery seedling. 15.
- BOSTON BEAUTY, H. Poly.-Ayr. (R. & J. Farquhar & Co., 1919.) Orleans × (Katharina Zeimet × an old Ayrshire rose.) 33.
- BRIDAL WREATH, H.W. (Manda, 1909.) 37.
- BRIDE, T. (May, 1885.) 15, 19. Sport from Catherine Mermet. 16. Syn., The Bride. 15.
- BRIDESMAID, T. (Moore, 1892.) 15, 19. Sport from Catherine Mermet. Probably identical with The Hughes. 16.
- BRIGHTON BEAUTY, T. (Originated by Bragg; intro. by May, 1891.) 16, 17.
- BURBANK, Ben. (Burbank; intro. by Burpee, 1898.) 5, 42. Armosa (Hermosa) × seedling of Bon Silene. 15, 19.
- BUTTERCUP, Cl.T. (California Rose Co., 1908.) 15. Seedling of unknown parentage. 30.
- CALIFORNIA, H.T. (Howard & Smith, reg. A. R. S., 1916)
- CANADIAN QUEEN, H.T. (Reg. by H. Dale Estate, 1902; intro. by Breitmeyer Floral Co., 1911.) 41, 42.
- CAPTAIN HUDSON, Per. (Kersbargen Brothers, 1911.) 15.
- CARDINAL, H.T. (J. Cook, 1904.) Liberty × unnamed red seedling. 19.

- CARISSIMA, H.W. (Walsh, 1905.) 15. Seedling of Wichuraiana. 19.
CAROLINE COOK, T. (Anthony Cook, 1871.) Seedling of Safrano. 17.
CATHERINE BELL, H.P. 20. (Bell & Son, 1877.) 17.
CELESTE, H.W. (Walsh, 1911.) 40.
CHAMPION OF THE WORLD, Ben. (Woodhouse, 1894.) 1.
CHAMPNEY'S PINK CLUSTER, N. Supposed hybrid of *R. chinensis* × *R. moschata* raised about 1816 by John Champney, of Charleston, S. C. About 1817 Philip Noisette, of the same city, grew from it a rose which his brother, Louis Noisette, of Paris, distributed as Blush Noisette. 2, 16.
CHAMP WEILAND, H.T. (Weiland and Risch, reg. A. R. S., 1915.) Sport from Killarney. 15.
CHARLES GETZ, B. (Anthony Cook, 1871.) 17.
CHARLES WAGNER, H.P. (Van Fleet, 1904; intro. by Conard & Jones Co.) Jean Liabaud × Victor Hugo.
CHILDS' JEWEL, H.T. (Childs, 1902.) Sport from Killarney. 15.
CHRISTINE WRIGHT, H.W. (Hoopes, Bro. & Thomas Co., 1909.) Unnamed seedling × Mme. Caroline Testout.
CINDERELLA, H.W. (Walsh, 1909.) 15, 19.
CLARA BARTON, H.T.-Poly. (Van Fleet; intro. by Conard & Jones Co., 1898.) Clotilde Soupert × American Beauty. 16, 32.
CLIMBING AMERICAN BEAUTY, H.W. (Hoopes, Bro. & Thomas Co., 1909.) American Beauty × Marion Dingee × Wichuraiana. 15. Silver Medal, A. R. S., 1915.
CLIMBING BRIDESMAID, T. (Dingee & Conard, 1897.) Sport. 15, 42.
CLIMBING CECILE BRUNNER, Poly. (Sport at Riverside, Calif., 1901.) 15.
CLIMBING CLOTILDE SOUPERT, Poly. (Dingee & Conard, 1902.) Sport. 19.
CLIMBING COL. R. S. WILLIAMSON, H.T. (Dingee & Conard, —.) Sport. 15.
CLIMBING COMTESSE EVA STARHEMBERG, T. (Glen Saint Mary Nurseries, 1917.) Sport. 15.
CLIMBING ETOILE DE FRANCE, H.T. (Howard Rose Co., 1915.) Sport. 15.
CLIMBING FRAU KARL DRUSCHKI, H.P. (Lawrenson, 1906.) Sport. 15, 19.
CLIMBING GRUSS AN TEPLITZ, H.T. (Storrs & Harrison, 1911.) Sport. 15.
CLIMBING HELENE CAMBIER, H.T. (California Rose Co., 1911.) Sport. Syn., Climbing Helene Gambier. 15.
CLIMBING HELEN GOULD, H.T. (Good & Reese, 1912.) Sport from Balduin (Helen Gould). 15.
CLIMBING HUGH DICKSON, H.P. (California Rose Co., 1914.) Sport. 15.
CLIMBING KILLARNEY, H.T. (Reinberg, 1908.) Sport. 15.
CLIMBING LA FRANCE, H.T. (Henderson, 1893.) Sport. 1, 3, 19.
CLIMBING LIBERTY, H.T. (May, 1908.) Sport. 23, 26.
CLIMBING MARIE GUILLOT, T. (Dingee & Conard, 1898.) Sport. 42.
CLIMBING METEOR, H.T. Sport. 3.
CLIMBING MME. JULES GROLEZ, H.T. (Dingee & Conard, —.) Sport. 15.
CLIMBING MME. WELCHE, T. (Mellen, 1911.) Sport. 15.
CLIMBING MOSELLA, Poly. (Conard & Jones Co., 1909.) Sport. 15, 19, 25.
CLIMBING MRS. W. J. GRANT, H.T. (E. G. Hill Co., 1899.) Sport from Mrs. W. J. Grant (Belle Siebrecht). Syn., Climbing Belle Siebrecht (W. Paul & Son, 1899). 15, 23.
CLIMBING MY MARYLAND, H.T. (Dingee & Conard, 1915.) Sport. 15.
CLIMBING ORIENTAL, C. (U. S. Department of Agriculture, 1914.) Seedling. 15.
CLIMBING PAPA GONTIER, Cl.T. (Chase & Co., 1905.) Sport. 15, 30.
CLIMBING PERLE DES JARDINS, T. (J. Henderson, 1891.) Sport, 2, 3, 13, 17, 19.
CLIMBING PINK AMERICAN BEAUTY, H.T. (U. S. Nurs. Co., reg. 1914.) 15.

- CLIMBING PINK MAMAN COCHET, T. (Conard & Jones Co., 1915.) Sport. Syns., Climbing Maman Cochet; Climbing Pink Cochet. 15.
- CLIMBING RAINBOW, T. (California Rose Co., 1914.) Sport. 15.
- CLIMBING RHEA REID, H.T. (California Rose Co., 1914.) Sport. 15.
- CLIMBING ROSEMARY, H.T. (Dingee & Conard, —.) Sport. 15.
- CLIMBING SUNBURST, H.T. (Howard Rose Co., 1915.) Sport. 15.
- CLIMBING WHITE KILLARNEY, H.T. (Conard & Jones Co., —.) Sport. 15.
- CLIMBING WINNIE DAVIS, T. (California Rose Co., 1913.) Sport. 15.
- CLIMBING WOOTTON, H.T. (Thos. Butler, 1899.) Sport of Souv. of Wootton. 15.
- COLUMBIA, H.W. (Hoopes, Bro. & Thomas Co., 1903.) Unnamed seedling × Mme. Caroline Testout.
- COLUMBIA, H.T. (E. G. Hill Co., reg. A. R. S., 1917.) Ophelia × Mrs. George Sawyer.
- COQUINA, H.W. (Walsh, 1911.) 40.
- CORA L. BARTON, N. (Buist, 1850.) Seedling from Lamarque. 21.
- CORNELIA, H.T. (Robert Scott & Son, Inc., reg. A. R. S., 1919.) Ophelia × Mrs. Aaron Ward. 15.
- CORNELIA COOK, T. (Cook, 1855.) 15, 19. Sometimes given as Cornélie Koch. (A. Koch, 1855.) Seedling from Devonienensis. 17.
- CORONA, H. Ramb. (Burbank, 1913.) 15.
- CORONET, H.T. (Dingee & Conard, 1897.) Carmine, 1; white, yellow, 13.
- CRIMSON CHAMPION, H.T. (Cook, 1916.) 15.
- CRIMSON QUEEN, H.T. (Montgomery, 1912.) Liberty × Richmond × General MacArthur.
- CRIMSON ROAMER, H.W. (Manda, 1901.) Bardou Job × Jersey Beauty.
- CRUSADER, H.T. (Montgomery & Co., Inc., reg. A. R. S., 1919; intro. by A. N. Pierson, Inc., 1920.) Seedling. 15.
- CUMBERLAND BELLE, Moss. (Dreer, 1900.) Sport from Princess Adelaide. 19.
- DARK PINK KILLARNEY, H.T. (A. N. Pierson, Inc., 1910.) Sport. 27.
- DARK PINK RUSSELL, H.T. (Montgomery, 1916.) Sport. 15.
- DAVID HARUM, H.T. (E. G. Hill Co., 1904.) 3, 19.
- DAWSON, H. Mult. (Dawson, 1888; intro. by Wm. C. Strong, 1890.) *R. multiflora* × General Jacqueminot twice. 19.
- DAWSONIANA, Mult. (Ellwanger, 1901.) 13.
- DAYBREAK, H.W. (Dawson, 1909.) *R. Wichuraiana* × *R. indica carnea*.
- DAYDAWN, H.T. (Heller Brothers, 1909.) 15.
- DEBUTANTE, W. (Walsh, 1902.) *R. Wichuraiana* × Baroness Rothschild. 15, 16, 19.
- DEFIANCE, H.T. (E. G. Hill Co., 1907.) Lady Battersea × Gruss an Teplitz. 19.
- DEFIANCE, H.T. (Kress, registered 1914.) Gruss an Teplitz × Etoile de France.
- DELIGHT, H. Cl. (Walsh, 1904.) A. R. S. Cert. of Merit. 15, 19.
- DINSMORE, H.P. (Henderson, 1888.) 1.
- DOROTHY PERKINS, H.W. (Jackson & Perkins, 1902.) *R. Wichuraiana* × Mme. Gabriel Luizet. 9. (1901.) 15.
- DOUBLE IMPROVED WHITE KILLARNEY, H.T. (S. J. Reuter & Sons, 1911.) Sport. 42.
- DOUBLE LÆVIGATA, Læv. (California, 1900.) Syns., Double Cherokee; *R. lævigata flore-pleno*. 15.
- DOUBLE OPHELIA, H.T. (E. G. Hill Co., reg. A. R. S., 1917.) Ophelia × unnamed seedling.
- DOUBLE PINK KILLARNEY, H.T. (Robert Scott & Son., 1910 and F. R. Pierson, 1911.) Sport. 15, 40.

- DOUBLE WHITE KILLARNEY, H.T. (Budlong, 1913.) Sport. 15.
 DOUBLE WHITE KILLARNEY, H.T. (Totty, 1914.) Sport. 15.
 DR. HUEY, H.W. (Capt. George C. Thomas, Jr., 1914; reg., A. R. S., 1920; intro. by Bobbink & Atkins and A. N. Pierson, Inc., 1920.) Ethel × Gruss an Teplitz. 43.
 DR. KANE, N. (Pentland, 1856.) 16, 17.
 DR. W. VAN FLEET, H.W. (Van Fleet; intro. by P. Henderson & Co., 1910.) *R. Wichuraiana* × Souv. du President Carnot. Syns., Dr. Van Fleet; Van Fleet Rose. 15, 32.
 EASTERN GEM, T. (Conard & Jones Co., 1905) 19.
 EDWARD VII, Poly. (Schultheis, 1910.) 26.
 EDWIN LONSDALE, H.W. (Hoopes, Bro. & Thomas Co., 1903.) *R. Wichuraiana* × Safrano. 19.
 ELEGANS, Set. (Feast, about 1843.) Syn., Chillicothe Multiflora. 10.
 ELIZABETH ZEIGLER, H.W. (A. N. Pierson, reg. 1917.) Sport of Dorothy Perkins.
 ELLA CHATIN, H.T. (E. G. Hill Co., 1909.) 13.
 ELLA MAY, T. (May, 1890.) 5.
 EMPRESS OF CHINA, Bengal. (Jackson & Perkins, 1896.) 5, 15, 19. Syn.. Apple Blossom. 15.
 ENCHANTER, H.T. (J. Cook, 1903.) Mme. Caroline Testout × Furon. 19.
 ERSKINE PARK BELLE, W. (Edw. J. Norman.) Sport from *R. Wichuraiana*. 15.
 ETOILE DE FRANCE, JR., H.T. (California Rose Co., 1911.) Sport. 15.
 EVA CORINNE, Set. (Pierce, of Washington, D. C., 185-) 10.
 EVANGELINE, H.W. (Walsh, 1906.) 15, 19. *R. Wichuraiana* × Crimson Rambler. 12.
 EVELYN, H.T. (A. N. Pierson, Inc., reg. A. R. S., 1918.) Sport of Ophelia. 15.
 EVERBLOOMING PRAIRIE QUEEN, H. Set. (P. H. Meehan; intro. by Dingee & Conard Co., 1898.) 42.
 EVERGREEN GEM, H.W. (Manda, 1889.) *R. Wichuraiana* × Mme. Hoste. 19.
 EXCELSA, H.Cl. (Walsh, 1908.) Syn., Red Dorothy Perkins. 15. Hubbard Gold Medal, A. R. S., 1914.
 FARQUHAR, H.W. (Dawson, 1903; intro. by R. and J. Farquhar). 31. *R. Wichuraiana* × Crimson Rambler. 15, 16, 19. Syn., The Farquhar. 15.
 FELICITY, H.T. (Clark Bros., reg. A. R. S., 1919.) Ophelia × Hoosier Beauty. 15.
 FLAG OF THE UNION, T. (Hallock & Thorpe.) Sport from Bon Silene. 17.
 FLORENCE CHENOWETH, Aus. Brier. (Chenoweth, reg. A. R. S., 1918.) Sport of Mme. Edouard Herriot. 15.
 FLOWER OF FAIRFIELD, Mult. (Schultheis, 1909.) 13. (1908.) 15. (Ludorf, 1908.) 19. Syn., Everblooming Crimson Rambler. 15.
 FLUSH O'DAWN, H.T. (Walsh, 1902.) Margaret Dickson × Sombreuil. 19. Syn., Blush o'Dawn. 42.
 FOUR HUNDRED, H.P. (Connor, 1901.) Sport from American Beauty. 42.
 FRANCES WILLARD, T. (Good & Reese, 1899.) Marie Guillot × Coquette de Lyon. Syn., President Cleveland. 15, 42.
 FRANCIS SCOTT KEY, H.T. (J. Cook, 1913.) Radiance × No. 411 (an unnamed crimson seedling).
 FRANK W. DUNLOP, H.T. (John H. Dunlop, reg. A. R. S., 1919; intro. by C. H. Totty Co., 1920.) Mrs. Charles Russell × Mrs. George Shawyer. 15.
 FREEDOM, H.T. (Griffin, 1900.) 42.
 FREEDOM, H. W. (F. R. M. Undritz, reg. A. R. S. 1918; intro. by Reinhold Undritz, 1918.) Silver Moon × Kaiserin Auguste Victoria. Syn., Climbing White American Beauty.

- GAINSBOROUGH, CL.H.T. (Good & Reese, 1903.) Sport from Viscountess Folkestone. Syns., Climbing Viscountess Folkestone; Gainesboro. 15.
- GALAXY, W. (Walsh, 1906.) 26.
- GARDENIA, H.W. (Manda, 1899.) *R. Wichuraiana* × *Perle des Jardins*. 19. Syn., Hardy Marechal Niel. 15.
- GARDEN'S GLORY, H.T. (Conard & Jones Co., 1905.) 42.
- GARNET CLIMBER, H.W. (Van Fleet, 1907; intro. by P. Henderson & Co., 1908.) *R. Wichuraiana* × *Lucullus*. 32, 39.
- GEM OF THE PRAIRIE, Set. (Burgesse, 1868.) *Beauty of the Prairies* × *Mme. Laffay*. 7.
- GEN. JOHN PERSHING, H. W. (F. R. M. Undritz, reg. A. R. S., 1917, as "F. R. M. Undritz"; intro. by Reinhold Undritz.) *Dr. W. Van Fleet* × *Mrs. W. J. Grant* (Belle Siebrecht). 15. Name changed by permission of Executive Committee, A. R. S., Jan. 12, 1920.
- GENERAL MACARTHUR, H.T. (E. G. Hill Co., 1904.) 19.
- GENERAL ROBERT E. LEE, T. (Good & Reese, 1896.) 15.
- GENERAL VON MOLTKE, H.P. (Bell & Son, 1873.) Seedling from *Charles Lefebvre*. Inferior. 17.
- GENEVIEVE, H.Cl. (Jackson & Perkins, 1911.) 42.
- GEORGE PEABODY, B. (Pentland, 1857.) 16. Seedling from *Paul Joseph*. 17.
- GLADYS TALBOT, H.W. (Manda, 1904.) 37.
- GLORIFIED LA FRANCE, H.T. (J. Cook, reg. A. R. S., 1919.) *Frau Karl Druschki* × *Mrs. Charles Russell*. 15.
- GOLDEN GATE, T. (Dingee & Conard, 1892.) 9, 19. *Safrano* × *Cornelia Cook*. 5, 9. (Jones of New Orleans, about 1888.) 16.
- GOLDEN GEM, H.T. (Towill, reg. A. R. S., 1917.) *Lady Hillingdon* × *Harry Kirk*.
- GOLDEN RULE, H.T. (E. G. Hill Co., 1918.) *Ophelia* seedling × *Sunburst*.
- GOLDEN TROPHY, Cl. T. (California Rose Co., 1914.) 15. Sport from *Duchesse de Auerstadt*. 30.
- HADLEY, H.T. (Montgomery Co.; intro. by A. N. Pierson, Inc., 1914.) (*Liberty* × *Richmond*) seedling × *General MacArthur*. Awarded Gold Medal, A. R. S., 1914.
- HANSEN, H. Ru. (Prof. Budd, 189-.) Syn., *Hansa*. 15.
- HARISON'S YELLOW, Brier. (Harison, of New York.) 10, 19. (1830.) 15. Syns., *R. Harisonii*; *Hogg's Yellow*; *Yellow Sweetbrier*. 21. Possibly a hybrid of *Austrian Briar* × *R. spinosissima*. 34.
- HELEN GOOD, T. (Good & Reese, 1906.) Sport from *Maman Cochet*. 15, 19. Syn., *Golden Cochet*. 15.,
- HELEN MILLS, H.T. (Dingee & Conard Co., 1910.) 25.
- HELEN TAFT, H.T. (U. S. Department of Agriculture, 1913.) Syn., *Miss Helen Taft*. 15.
- HENRY IRVING, H.P. (Conard & Jones Co., 1907.) 19.
- HENRY M. STANLEY, T. (Dingee & Conard, 1879.) 15.
- HIAWATHA, H.Cl. (Walsh, 1904.) First Prize, A. R. S. 15, 16. *Crimson Rambler* × *Carmine Pillar*. 19.
- HIBBERTIA, C. (Buist, about 1830.) 21.
- HIGHLAND MARY, T. (Dingee & Conard, 1908.) 19.
- HILDA, H.T. (Myers & Samtman, 1911.) Sport from *My Maryland*. 40.
- HOOSIER BEAUTY, H.T. (F. Dorner & Sons Co., 1915.) Syn., *Liberty Beauty*.
- IDA, H.Cl. (Dawson 189-; not formally introduced.) *Dawson* × *R. multiflora*. 29.
- IDEAL, H.T. (Jacob Becker, 1900.) 15, 19.
- IMPROVED RAINBOW, T. (Burbank, —.) 15.
- IMPROVED UNIVERSAL FAVORITE, H.W. (Manda, 1901.) 37.

- INDIANA, H.T. (E. G. Hill Co., 1907.) 13. Rosalind Orr English \times Frau Karl Druschki. 12.
- INTENSITY, H.T. (Dingee & Conard, 1903.) 19, 25.
- ISABELLA GRAY, N. (Gray, 1855.) Seedling from Cloth of Gold or Chromatella. 8, 17.
- ISABELLA SPRUNT, T. (Sprunt, 1866.) 15. Sport from Safrano. 17.
- IVORY, T. (American Rose Co., 1902.) Sport from Golden Gate. 3, 19. Syn., White Golden Gate. 15.
- JACKSONIA, C. (Buist, about 1830.) Syn., Hundred-leaved Daily. 21.
- JAMES SPRUNT, Cl. Ben. (Sprunt, 1856.) 6, 9. Sport from Agrippina. 17.
- JANE, Set. (Pierce, about 1850.) 1, 10.
- JERSEY BEAUTY, H.W. (Manda, 1899.) *R. Wichuraiana* \times Perle des Jardins. 19.
- JESSICA, H.W. (Walsh, 1909.) 25.
- JOHN BURTON, W. (Hoopes, Bro. & Thomas Co., 1903.) *R. Wichuraiana* \times Safrano. 19.
- J. S. FAY, H.P. (Walsh, 1899.) 15, 19. Prince Camille de Rohan \times Souv. de Pierre Notting. 42.
- JUANITA, H.W. (Walsh, 1907.) 38.
- JUBILEE, H.P. (Henderson, 1898.) 1, 19. (1897.) 15. (Walsh, 1897.) Victor Hugo \times Prince Camille de Rohan. 16.
- KALMIA, H.W. (Walsh, 1913.) 15.
- KEYSTONE, Mult. (Dingee & Conard, 1904.) 15, 19.
- KILLARNEY QUEEN, H.T. (J. A. Budlong & Son Co.; intro. by A. N. Pierson, Inc., 1912.) Sport. 40.
- KING DAVID, H.T. (California Rose Co., 1910.) 15. Sport from Vick's Caprice. 30.
- KING OF THE PRAIRIES, Setigera type. (Feast, 1843.) 1, 10.
- LA DETROIT, H.T. (Hopp, 1904; intro. by P. Breitmeyer's Sons., 1905.) Mme. Caroline Testout \times Bridesmaid. 15, 42.
- LADY ANN BORODELL, H.T. (S. J. Reuter & Son, Inc., reg. A. R. S. 1914.) Sport from My Maryland. 28.
- LADY BLANCHE, H.W. (Walsh, 1913.) 15.
- LADY CROMWELL, H.T. (A. N. Pierson, Inc., 1910.) Sport of My Maryland. 42.
- LADY DOROTHEA, T. (Dunlop, 1898.) 16. Sport of Sunset. 42.
- LADY DUNCAN, H.W. (Dawson, 1909.) *R. Wichuraiana* \times *R. rugosa*.
- LADY GAY, W. (Walsh, 1905.) 15, 19. *R. Wichuraiana* \times Bardou Job. 5, 16.
- LADY JOY, H.T. (Nanz & Neuner, 1901.) American Beauty \times Mrs. W. J. Grant (Belle Siebrecht). 42.
- LADY MARS, Cl. T. (California Rose Co., 1909.) 15. Sport from Gloire de Dijon. 30.
- LA FIAMMA, H.W. (Walsh, 1909.) 15, 19. Syn., La Flamme. 15.
- LANDRETH'S CARMINE, N. (D. & C. Landreth, 1824.) Syn., Carmine Cluster. 10.
- LANSLOWNE, H.T. (Leonard, reg. 1914.) 15.
- LE VESUVE, Ben.-C. (Sprunt, 1858.) 3.
- LILIAN NORDICA, H.T. (Walsh, 1898.) Margaret Dickson \times Mme. Hoste. 42.
- LITTLE SUNSHINE, Poly. (Alexander R. Cumming, Jr.; reg. A. R. S., 1915, A. N. Pierson, Inc.) *R. multiflora nana* \times Soleil d'Or.
- LITTLE WHITE PET, Poly. (Henderson, 1879.) 1, 13, 19.
- LOS ANGELES, H.T. (Howard & Smith, reg. A. R. S., 1916.) Mme. Second Weber \times Lyon Rose. 15.
- LUCILE, H.W. (Walsh, 1911.) 40.
- LUTEA, N. (Buist, —.) Syn., *R. Smithii*. 21.
- MADELEINE LEMOINE, Hyb. (Franceschi, —.) *R. moschata* \times *R. odorata gigantea*. 34.

- MADISON, T. (Hentz, 1912.) 15.
- MADONNA, H.T. (J. Cook, 1908.) Furon × Marie Van Houtte.
- MAGNAFRANO, H.T. (Van Fleet, 1905; intro. by Conard & Jones Co.) Magna Charta × Safrano. 19.
- MAID MARION, H.W. (Walsh, 1909.) 15.
- MAID OF HONOR, T. (Hoffmeister, 1899.) Sport of Catherine Mermet. 16, 19.
- MANDA'S TRIUMPH, W. (Manda, 1898.) 37. *R. Wichuraiana* × a Hybrid Perpetual. 19.
- MARION BRUNELL, C.T. (F. H. Brunell, Alabama, 1917.) Sport of Reine Marie Henriette. 15.
- MARION DINGEE, H.T. (J. Cook, 1889.) Caserta × General Jacqueminot × Safrano. 19.
- MARK TWAIN, H.T. (E. G. Hill Co., reg. A. R. S., 1902.) 5, 13, 19, 25.
- MARSHALL P. WILDER, H.P. (Ellwanger & Barry, 1885.) 15, 16, 17.
- MARY HILL, H. T. (E. G. Hill Co., 1917.) Ophelia × Sunburst.
- MARY LOVETT, H. W. (Van Fleet, 1915; intro. by J. T. Lovett, 1915.) *R. Wichuraiana* × Kaiserin Auguste Victoria.
- MARY WASHINGTON, Mult. Said to have been planted by George Washington on his estate at Mount Vernon and named by him in honor of his mother. 18. Syn., Martha Washington. 15.
- MASTER BURKE (*R. Lawrenciana*), Species. (Feast, —.) 21.
- MAUD LITTLE, T. (Dingee & Conard, 1891.) 1.
- MAYOURNEEN, H.T. (The Florex Gardens, reg. A. R. S., 1913.) Sport from Killarney. 37.
- MAX GRAF, Hyb. (Reg. A. R. S., 1919, by James H. Bowditch as *Rosa hybrida* Max Graf. Probably hybrid of *R. Rugosa* × *R. setigera*.)
- MAYFLOWER, T. (E. G. Hill Co., 1910.)
- MAY MARTIN, H.T. (Martin & Forbes, 1918.) Sport of Ophelia.
- MAY MILLER, H.T. (E. G. Hill Co., 1910.) Unnamed seedling × Paul Neyron. 5.
- MAY QUEEN, H.W. (Van Fleet, 1898; intro. by Conard & Jones Co.) 19. *R. Wichuraiana* × Mrs. de Graw. 16.
- MILADY, H.T. (Towill, 1913.) Richmond × J. B. Clark.
- MILKY WAY, H.W. (Walsh, 1909.) 15.
- MINNEHAHA, H.W. (Walsh, 1905.) 15. *R. Wichuraiana* × Paul Neyron. 5, 16, 19.
- MINNIE DAWSON, H.Cl. (Dawson 189—; intro. by Ellwanger & Barry.) *R. multiflora* × Dawson. 29, 31.
- MINNIE FRANCIS, T. (America, —.) 15.
- MISS ALICE ROOSEVELT, H.T. (American Rose Co., reg. 1902.) 42.
- MISS BELL, T. (Intro. and date unknown.) 10.
- MISS KATE MOULTON, H.T. (Monson; intro. by Minneapolis Floral Co., 1906.) 42. Mme. Caroline Testout × La France × Mrs. W. J. Grant (Belle Siebrecht). 15, 19.
- MISS LOLITA ARMOUR, Per. (Howard & Smith, 1919.) Result of a cross between two unnamed seedlings. 15.
- MISS MAUDY SHUBROOK, H.T. (California Rose Co., 1914.) Sport from Mrs. Aaron Ward. 15.
- MISS RUBY DENT, H.P. (California Rose Co., 1916.) Sport from Mrs. John Laing; also classed as a Hybrid Tea. 15.
- MISS SARAH NESBITT, T. (B. Dorrance, 1910.) 27. Sport from Mme. Cusin. 42.
- MISS SARGENT, T. (Mackenzie, of Philadelphia, about 185—.) 10.
- MLEE, MARTHE HYRIGOYEN, H. C. (E. G. Hill Co., 1902.) 25.
- MME. BOLL, H.P. (Boll, 1859.) 5, 6, 16, 17.

- MME. BUTTERFLY, H.T. (E. G. Hill Co., 1918.) Sport of Ophelia.
MME. BYRNE, N. (Buist, 1850.) 10. Seedling of Lamarque. 21.
MME. TRUDEAUX, H.P. (Boll, 1850.) 1, 17.
MME. TRUDEAUX, D. (Boll, —.) 10.
MONTARIOSIA, Hybrid. (Franceschi, —.) *R. moschata* × *R. odorata gigantea*. 34.
MONTECITO, Hybrid. (Franceschi, —.) *R. moschata* × *R. odorata gigantea*. 34.
MONTROSE, H.T. (J. Cook, 1916.) 15. Unnamed red × Laurent Carle.
MRS. BAYARD THAYER, H.T. (Waban Rose Cons., reg. A. R. S., 1916.) 15.
MRS. BELMONT TIFFANY, H.T. (Budlong, reg. A. R. S., 1917; intro. by A. N. Pierson, Inc., 1918.) Sport of Sunburst.
MRS. CHARLES BELL, H.T. (A. N. Pierson, Inc., reg. A. R. S., 1917.) Sport of Radiance.
MRS. CHARLES RUSSELL, H.T. (Montgomery, 1913.) "Mme. Abel Chatenay, Marquise Litta de Breteuil, Mme. Caroline Testout, Mrs. W. J. Grant (Belle Siebrecht), General MacArthur, and three seedlings resulting from these crosses are all combined to produce Mrs. Charles Russell." 15.
MRS. CHAS. DINGEE, H.T. (Dingee & Conard, —.) 15.
MRS. CHAS. GERSDORFF, Cl.H.T. (Gersdorff, reg. A. R. S., 1916.) White climbing rose × Killarney.
MRS. CLEVELAND, H.P. (Gill, 1897.) 1, 13, 19.
MRS. DE GRAW, B. (Burgess, 1885.) 16.
MRS. E. T. STOTESBURY, H.T. (Edward Towill, reg. A. R. S., 1918.) Seedling (Joseph Hill × My Maryland) × Milady.
MRS. F. F. THOMPSON, H.T. (Totty, 1915.) Sport of Mrs. George Shawyer. 15.
MRS. HENRY WINNETT, H.T. (Dunlop, reg. A. R. S., 1917.) Mrs. Charles Russell × Mrs. George Shawyer. 15.
MRS. JAMES G. PENNY, H.T. (Joseph W. Vestal & Son, —.) Sport of Radiance.
MRS. J. C. AINSWORTH, H.T. (Clarke Bros., 1918.) Sport of Mrs. Charles Russell.
MRS. JOHN COOK, H.T. (J. Cook, reg. A. R. S., 1919; intro. by A. N. Pierson, Inc., 1920.) Ophelia × three unnamed seedlings. 15.
MRS. J. PIERPONT MORGAN, T. (May, 1895.) 15, 16. Sport from Mme. Cusin. Syn., Mrs. Pierpont Morgan. 15.
*MRS. LOVETT, H.W. (Dr. Van Fleet, —.) 15.
MRS. MARSHALL FIELD, H.T. (Reinberg, 1906.) 42.
MRS. MARY NEIHOFF, H.T. (Neihoff, 1908.) Syn., Aurora. 42.
MRS. M. H. WALSH, H.Cl. (Walsh, 1911.) Syn., Mrs. Walsh. 15. Gold Medal of A. R. S., 1911.
MRS. MOORFIELD STOREY, H.T. (Waban Rose Conservatories, reg. A. R. S., 1915.) General MacArthur × Joseph Hill.
MRS. OLIVER AMES, T. (R. Montgomery, 1898.) Sport from Mrs. J. Pierpont Morgan. 42.
MRS. OPIE, T. (Bell & Son, 1877.) 17.
MRS. PAUL NEIHOFF, H.T. (Neihoff, 1903.) 39.
MRS. PIERCE, Set. (Pierce, about 1850.) 10, 17. Syn., Mrs. Hovey. 22.
MRS. POTTER PALMER, H.T. (Breitmeyer, 1909.) 19, 25.
MRS. R. B. MELLON, H. Spin. (Elliott Nursery, 1917.) Seedling. 15.
MRS. ROBERT GARRETT, H.T. (J. Cook, 1900.) Caserta × F. E. Verdier.
MRS. ROBERT PEARY, Cl.H.T. (De Voecht & De Wilde; intro. by Dingee & Conard, 1898.) Sport from Kaiserin Auguste Victoria. 15, 42.

*Probably identical with Mary Lovett, H.W.

- MRS. SARAH YEATS, H.T. (Originated and reg. by Yeats, 1916; intro. by A. L. Randall Co., 1917.) 15.
- MRS. S. K. RINDGE, Per. (Howard & Smith, 1919.) Rayon d'Or × Frau Karl Druschki. 15.
- MRS. STERLING, H.T. (J. Cook, 1918; not disseminated.) Antoine Rivoire × unnamed pink seedling. 15.
- MRS. THEODORE ROOSEVELT, H.T. (E. G. Hill Co., 1904.) Sport of La France. 19.
- MRS. WALTER T. SUMNER, H.T. (Clarke Bros., reg. A. R. S., 1920.) Ophelia × Hadley. 15.
- MRS. W. C. WHITNEY, H.T. (May, 1894.) 11, 16.
- MRS. WM. R. HEARST, H.T. (A. N. Pierson, Inc., reg. A. R. S., 1916.) Sport of My Maryland. 15.
- MURIEL MOORE, H.T. (Moore, 1916.) Sport of My Maryland.
- MY MARYLAND, H.T. (J. Cook, 1908.) Madonna × Enchanter.
- NEVIA, Set. (Feast, 1843.) 10.
- NEW CENTURY, H.Ru. (Van Fleet, 1900; intro. by Conard & Jones Co.) *R. rugosa* × Clotilde Soupert.
- NEWPORT FAIRY, H.Mult. (Gardner; intro. by Roehrs, 1908.) 12, 19. *R. Wichuraiana* × Crimson Rambler. Syn., Newport Rambler. 39, 42.
- NILES COCHET, T. (California, —.) 15.
- NOKOMIS, W. (M. H. Walsh, 1918.) *R. Wichuraiana* × Comte de Raimbaud.
- NORMA, H.T. (Dingee & Conard, 1904.) 4, 19, 25.
- NORTHERN LIGHT, H.W. (Van Fleet, 1898; intro. by Conard & Jones Co.) *Wichuraiana* hybrid. 19.
- OAKMONT, H.P. (May, 1893.) 15, 19.
- OLD BLUSH, N. (Noisette, 1817.) 2.
- OLIVIA, H.T. (E. G. Hill Co., 1907.) 15, 19. Syn., Oliva. 15.
- OPHELIA SUPREME, H.T. (Dailedouze Bros.; reg. Soc. American Florists, 1917.) Sport. 24.
- ORIOLE, H.Cl. (Jackson & Perkins, 1911.) 42.
- ORIOLE, H.T. (California Rose Co., 1910.) 15.
- PALLIDA, Set. (Feast, 1843.) 10, 17, 20.
- PANAMA, H. P. (E. G. Hill Co., 1908.) Paul Neyron × seedling of Joseph Hill. 5.
- PANAMA, H.T. (J. Cook, 1913; reg. A. R. S., 1919.) Frau Karl Druschki × unnamed pink seedling. Awarded Silver Medal, A. R. S., 1915.
- PAN-AMERICA, H.T. (Henderson, 1901.) American Beauty × Mme. Caroline Testout. 19, 42.
- PARADISE, H.W. (Walsh, 1907.) 15, 19.
- PAUL DE LONGPRE, H.T. (E. G. Hill Co., 1906.) 19.
- PAULINE DAWSON, H. Cl. (Dawson, 1916.) 31.
- PEARL QUEEN, H. W. (Van Fleet, 1898; intro. by Conard & Jones Co., 1911.) 32, 42. *R. Wichuraiana* × Mrs. de Graw. 16.
- PEARL RIVERS, T. (Dingee & Conard, 1890.) 1, 16.
- PERPETUAL MICHIGAN, Set. (Feast, about 1843.) 10.
- PHILADELPHIA, Ramb. Crimson Rambler × Victor Hugo. 16, 19. Probably the same as Philadelphia, H.Mult. (Van Fleet, 1904; intro. by Conard & Jones Co.) Syn., Philadelphia Crimson Rambler. 15.
- PILGRIM, H.T. (Montgomery Co., Inc., reg. A. R. S., 1919; intro. by A. N. Pierson, Inc., 1920.) Seedling. 15.
- PILLAR OF GOLD, Cl.T. (Conard & Jones Co., 1909.) 19.
- PINK BEAUTY, H.T. (J. Cook, reg. A. R. S., 1919.) Ophelia × My Maryland. 15.

- PINK CECILE BRUNNER, Poly. (Western Rose Co., 1918.) Sport. 15.
 PINK CHEROKEE, Læv. (California, 1887.) *R. lævigata* × *R. indica*. 15.
 PINK FRAU KARL DRUSCHKI, H.P. (California Rose Co., 1910.) Sport. 15.
 PINK OPHELIA, H.T. (Howard & Smith, 1916.) Sport from Ophelia.
 PINK PEARL, H.W. (Manda, 1901.) *R. Wichuraiana* × Meteor.
 PINK ROAMER, H.W. (Manda, 1898.) 19. Syn., Pink Rover. 15.
 PINK SOUPERT, Poly. (Dingee & Conard, 1896.) 1. Sport from Clotilde Soupert. 15.
 POM POM, H.Cl. (U. S. Department of Agriculture, 1910.) 25. Crimson Rambler × *R. Wichuraiana*. 15.
 PREMIER, H.T. (E. G. Hill Co., 1918.) Ophelia seedling × Mrs. Charles Russell. 15. Syn., Rose Premier, reg. A. R. S., 1917.
 PRESIDENT TAFT, H.T. (McCullough, 1908.) Syns., President W. H. Taft; Taft Rose; Wm. H. Taft. 15.
 PRETTY AMERICAN (*R. Lawrenciana*). (Boll, 183- or 185-) 10.
 PRIDE OF THE SOUTH, Set. (America, —) 15.
 PRIDE OF WASHINGTON, Set. (Pierce, about 185—) 7, 10, 19.
 PRIMROSE, T. (Dingee & Conard, 1908.) 19.
 PRINCESS, H.Cl. (Walsh, reg. 1902.) 42.
 PRINCESS BONNIE, T. (Dingee & Conard, 1897.) 1. Bon Silene × Wm. F. Bennett. 19.
 PRINCESS ENA, Poly. (H. B. May, 1907.) Sport of Baby Crimson Rambler. 26.
 PRINCE THEODORE BONNEY, H.T. (Dingee & Conard Co., 1898.) Bon Silene × William Francis Bennett. 42.
 PRINCETON, H.T. (Stockton & Howe, 1912.) 41.
 PRISCILLA, H.T. (Henderson, 1910.) Kaiserin Auguste Victoria × Frau Karl Druschki. 5, 25.
 PROF. C. S. SARGENT, H.W. (Hoopes, Bro. & Thomas Co., 1903.) *R. Wichuraiana* × Souv. d'Auguste Metral. (Not the same as Sargent.) 19.
 PURITY, H.W. (Hoopes, Bro. & Thomas Co., 1917.) Unnamed seedling × Mme. Caroline Testout. Silver Medal, A. R. S., 1915.
 QUEEN BEATRICE, H.T. (Credited to Kramer, 1907, by Good & Reese Co.) 15. (Dingee & Conard, 1906.) 15.
 QUEEN MADGE, H.T. (Fitzsimmons, reg. 1902.) 42.
 QUEEN OF EDGELY, H.P. (Floral Exchange, 1901.) 19, 42. Sport from American Beauty. Syn., Pink American Beauty. 15.
 QUEENS SCARLET, Ben. (Hallock & Thorpe, 1880.) 15, 17. Syn., Red Hermosa. 15.
 RADIANCE, H.T. (J. Cook; intro. by P. Henderson & Co., 1908.) Enchanter × Cardinal. Awarded Silver Medal of A. R. S., 1914. 19.
 RAINBOW, T. (Sievers, 1891.) Sport from Papa Gontier. 3, 19. (Dingee & Conard, 1891.) 2. Sievers was probably the originator.
 RAMONA, Læv. (Dietrich & Turner, 1913.) Sport from Pink Cherokee. Syn., Red Cherokee. 15.
 RED COLUMBIA, H.T. (Jos. H. Hill Co., 1920.) Sport. 15.
 RED KILLARNEY, H.T. (A. N. Pierson, Inc., 1910 or 1911.) Sport. 40, 42.
 RED RADIANCE, H.T. (A. N. Pierson, Inc., 1916.) Sport. 15.
 RED RADIANCE, H.T. (Gude Bros., 1916.) Sport. Darker than Pierson's. 15.
 REGINA, H. Ramb. (Walsh, 1916.) 15.
 RELIANCE, H.T. (E. G. Hill Co., 1910.) 4, 19. Etoile de France × Chateau de Clos Vougeot. 15.
 RENA ROBBINS, H.T. (E. G. Hill Co., 1911.) Paul Neyron × Mme. Jenny Gillemot.

- RHEA REID, H.T. (E. G. Hill Co., 1908.) American Beauty \times red seedling. 12, 19.
- RICHMOND, H.T. (E. G. Hill Co., 1905.) Lady Battersea \times Liberty. 19. Syn., Everblooming Jack Rose. 15.
- ROBERT CRAIG, H.W. (Hoopes, Bro. & Thomas Co., 1903.) *R. Wichuraiana* \times Beaute Inconstante. 19.
- ROBERT HELLER, T. (E. G. Hill Co., 1911.)
- ROBERT SCOTT, H.T. (Robert Scott & Son, 1901.) 15. Merveille de Lyon \times Mrs. W. J. Grant (Belle Siebrecht). 19.
- ROBIN HOOD, H.T. (E. G. Hill Co., 1912.)
- ROSALIE, T. (Ellwanger & Barry, 1884.) Seedling from Marie Van Houtte. 17.
- ROSALIND, H.T. (F. R. Pierson Co., reg. A. R. S., 1918.) Sport of Ophelia. 15.
- ROSALIND ORR ENGLISH, H.T. (E. G. Hill Co., 1905.) 3, 15. Mme. Abel Chatenay \times Papa Gontier. 19.
- ROSA BELLA, Species. (Raised from seed collected by Purdom and classified by Rehder & Wilson, from northwestern China, 1910.) 34, 35.
- ROSA BELLA PALLENS, Species. (Raised from seed collected by Purdom and classified by Rehder & Wilson, from northwestern China, 1910.) 34, 35.
- ROSA BRACTEATA, Species. (From China and Formosa, naturalized in America, —.) 34.
- ROSA CHINENSIS SPONTANEA, Species. (Rehder & Wilson, from central China between 1907 and 1910.) 34.
- ROSA DAVIDII ELONGATA, Species. (Rehder & Wilson, from southern China, 1908.) 34, 35.
- ROSA FILIPES, Species. (Rehder & Wilson, from southern China, 1910.) 34, 35.
- ROSA GIRALDII GLABRIUSCULA, Species. (Rehder & Wilson, from China, 1910.) 35.
- ROSA GIRALDII VENULOSA, Species. (Rehder & Wilson, from Central China, 1910.) 34, 35.
- ROSA GLOMERATA, Species. (Rehder & Wilson, from western China, 1910.) 34, 35.
- ROSA GRACILIFLORA, Species. (Rehder & Wilson, from China, 1908.) 35.
- ROSA HELENÆ, Species. (Rehder & Wilson, from Central China, 1907.) 29, 36.
- ROSA HUMILIS HYBRIDA, Hybrid. (America, before 1893.) *R. humilis* \times *R. rugosa*. 35.
- ROSA HYBRIDA, MAX GRAF. (James H. Bowditch, reg. A. R. S., 1919.) Probable hybrid of *R. rugosa* \times *R. setigera*. 43. Properly MAX GRAF.
- ROSA JACKII, Species. (Rehder, from China, 1905.) 29. Syn., *R. Kelleri*. 34.
- ROSA JACKSONII, Hybrid. (Jackson Dawson, 1897.) 35. *R. rugosa* \times *R. Wichuraiana*. 29.
- ROSA LÆVIGATA, Species. (Brought to America from China and Formosa early in 17th century.) Syns., *R. sinica*, *R. cherokensis*, *R. ternata*, *R. nivea*, Camellia, Cherokee Rose. 34, 36.
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- ROSA SPINOSISSIMA HYBRIDA. (Elliott Nursery, —.) 15.

- ROSA WATSONIANA, Species. (Edward Rand sent it to Arnold Arboretum in 1878, originally found by him in a garden at Albany, N. Y.) 35. Supposed to have been introduced from Japan but not known in wild state. 34.
- ROSA WICHURAIANA VARIEGATA. (Conard & Jones Co., —.) 15.
- ROSE MARIE, H.T. (F. Dorner & Sons, 1918.) Hoosier Beauty × Sunburst. 15.
- ROSEMARY, H.T. (E. G. Hill Co., 1907.) 15, 19.
- ROSE PREMIER, H.T. (E. G. Hill Co., reg. A. R. S., 1917.) Ophelia seedling × Mrs. Charles Russell. Is now generally known as Premier.
- ROSE QUEEN, H.T. (E. G. Hill Co., 1911.)
- ROSERIE, H.Ramb. (R. Witterstätter, 1917.) Sport from Tausendschön. 15. Syn., Rosary. 15.
- ROYAL CLUSTER, Ramb. (Conard & Jones Co., 1899.) Armosa (Hermosa) × Dawson. 19, 25.
- RUBY GOLD, T. (O'Connor, 1892.) Sport from a graft of Catherine Mermet on Marechal Niel. 16.
- RUBY QUEEN, H.W. (Van Fleet, 1899; intro. by Conard & Jones Co.) *R. Wichuraiana* × Queens Scarlet. 16.
- RUGOSA MAGNIFICA, H.Ru. (Van Fleet, 1905; intro. by Conard & Jones Co.) *R. rugosa* × Ards Rover.
- RUSSELLIANA, Set. 21. (Russel, 1900.) 25. Syns., Russell's Cottage; Russel's Cottage. 15. Syns., Scarlet Grevillea; Cottage Rose. 21.
- RUTH VESTAL, Cl.T. (Vestal & Sons, 1908.) Sport from Bride. 30. Syn., Climbing Bride. 15.
- SANTA ROSA, H. Ben.-T. (Burbank, 1900.) 13. 19. Second generation Hermosa seedling × seedling of Bon Silene. 42.
- SARAH ISABELLE GILL, T. (Gill, 1897.) 19.
- SARGENT, H.W. (Dawson, 1912.) *R. Wichuraiana* × Crimson Rambler × Baroness Rothschild. 31.
- SATISFACTION, N. (California Rose Co., 1915.) 15. Sport from Reve d'Or. 30.
- SEASHELL, H.Cl. (Dawson, 1916.) 31.
- SEPTEMBER MORN, H.T. (Turner, 1915.) Sport from Mme. Paul Euler. 15.
- SETIGERA HYBRID, Hybrid. (Dawson, —) *R. setigera* × *R. Wichuraiana*. 31.
- SETINA, Cl.B. (Henderson, 1879.) Sport of Armosa (Hermosa). Syns., Climbing Hermosa; Cetina. 9, 15, 17, 19.
- SHATEMUC, Poly. (Shatemuc Nurseries, 1911.) 42.
- SHEPHERD'S ORIOLE, N. (T. B. Shepherd Co., 1905.) 15.
- SILVER MOON, H.W. (Van Fleet; intro. by P. Henderson & Co., 1910.) *R. Wichuraiana* × *R. lœvigata* (Cherokee Rose.) 15, 32.
- SILVER STAR, H.W. (Frederick R. M. Undritz, reg. A. R. S., 1920.) Silver Moon × Marie Van Houtte.
- SIR THOMAS LIPTON, H.Ru. (Van Fleet, 1900; intro. by Conard & Jones Co.) *R. rugosa* × Clotilde Soupert. 19.
- SNOWBALL, Poly. (Henderson, 1899.) 42.
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- SNOWDRIFT, H.Cl. (Walsh.)
- SNOWDRIFT, W. (Smith, 1914.) 15.
- SNOWFLAKE, T. (Strauss & Co., Washington, D. C., 1890.) 15, 17.
- SOUTHERN BEAUTY, H.T. (Dingee & Conard, 1897.) 42.
- SOUTH ORANGE BEAUTY, H.W. (Manda, 1909.) 37.
- SOUTH ORANGE PERFECTION, W. (Manda, 1899.) 3. *R. Wichuraiana* × Mme. Hoste. 19.
- SOUV. DE HENRY CLAY, Scotch hybrid. (Boll, 1854.) 17.

- SOUV. OF WOOTTON, H.T. (J. Cook, 1888.) Bon Silene \times Louis Van Houtte. Said to be the first Hybrid Tea rose raised in the United States. 19. Syns., Souv. de la Wootton; Souv. de Wootton. 15.
- SPECTACULAR, H.T. (Elliott, 1912.) Syn., Striped Killarney. 15.
- SUMMER JOY, H.Cl. (Walsh, 1911.) 15.
- SUNBEAM, T. (California Rose Co., 1908.) 15. Sport from Golden Gate. 30.
- SUNSET, T. (Henderson, 1884.) 2, 9. Sport from Perle des Jardins. 9. (1883.) 16, 19.
- SUNSHINE, H.Cl. (Jackson & Perkins, 1911.) 42.
- SUPERBA, Setigera type. (Feast, 1843.) 10, 16, 17, 20.
- SWEETHEART, H.W. (Walsh, 1899.) *R. Wichuraiana* \times Bridesmaid. 15, 16, 19.
- SWEET MARIE, H.T. (California Rose Co., 1915.) Sport from Mrs. G. W. Kershaw. 15.
- SYLVIA, H.T. (F. R. Pierson Co., reg. A. R. S., 1918.) Sport of Ophelia. 15.
- TENNESSEE BELLE, H.Cl. (America, —.) 15.
- THE OREGON, H.T. (E. G. Hill Co., never formally introduced.) Liberty \times unnamed seedling. 12.
- THORA, H.T. (Burton, 1914.) 15.
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- TROUBADOUR, H.W. (Walsh, 1911.) 15.
- UNCLE JOHN, T. (Thorpe, 1904.) 15, 19. Sport from Golden Gate. 30.
- UNIVERSAL FAVORITE, H. W. (Manda, 1899.) 3. *R. Wichuraiana* \times American Beauty. 19.
- URANIA, H.Cl. (Walsh, 1902.) A. R. S. Special Newbold Fund Prize.
- URANIA, H.P. (Walsh, 1906.) 3. (1905.) Seedling from American Beauty. 16. American Beauty (Mme. Ferd. Jamain) \times Susanne Marie Rodocanachi (Mme. Rodocanachi). 19.
- VAUGHAN'S WHITE BABY RAMBLER, Poly. (Vaughan, 1916.) 15.
- VICK'S CAPRICE, H.P. (Vick, 1893.) 1. (1889.) 15. Sport from Archduchess Elizabeth d'Austrie. 15, 16, 19.
- VICTOR, H.T. (E. G. Hill Co., 1918.) Ophelia Seedling \times Killarney Brilliant.
- VICTORY, H. W. (F. R. M. Undritz, reg., A. R. S., 1918; intro. by Reinhold Undritz, 1918.) Dr. W. Van Fleet \times Mme. Jules Grolez.
- VIRGINIA, T. (Dingee & Conard, 1894.) 1.
- VIRIDIFLORA, Bengal. (Originated in Baltimore, Md., about 1850.) 10, 19. (Harrison, of Baltimore, Md., 1856.) 1. (Rambridge and Harrison, 1856.) 15. Syn., Green Rose. 15.
- WABAN, T. (E. M. Wood & Co., 1891.) Sport of Catherine Mermet. 16, 19.
- WASHINGTON, Ben. (D. & C. Landreth, about 1824.) 10.
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The Editor particularly requests information or corrections to aid in making this list accurate. In sending such, correspondents are requested to give exact details, so far as possible.

A catalogue of roses in American commerce has been compiled, and is in process of careful revision and verification. It will include name, origin if ascertainable, class, color, fragrance, form, petalage, bloom habit, plant habit, disease liability. Accurate information for this work is desired. See page 112 for details as to Rose Record Card.

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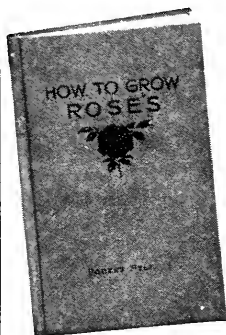
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How eagerly we all await the opening of the first bud on our roses early in June and how disappointed we are when on that much sought for morning we rise early and run into the garden only to find that a certain bug has been there before us and has destroyed the flower by eating holes in the petals. This particular bug is known as "Rose Chafer" or "Rose Beetle" and he belongs to the fastidious class of insects, for at first he will feast on all our white roses, then goes to the yellow, and then to the pink, and finally to the red, and when he has finished these, he devours peonies, irises or any other flower which he finds in our garden, and finally he destroys whole crops of grapes and cherries.

He is without doubt the most destructive bug of all and appears with the first open rose in June and remains with us for about six weeks.

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New Roses for 1920

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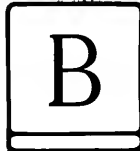
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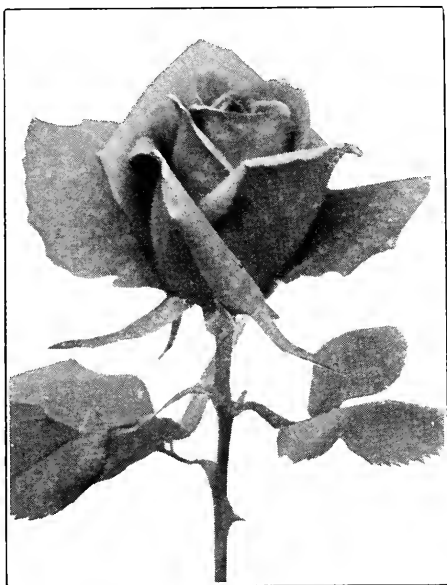
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